

RAILWAY AGE

NOV 18 1948

TRANSPORTATION LIBRARY

NOVEMBER 13, 1948



PAID FOR THEMSELVES TWICE IN NINE YEARS

Kansas City Terminal reports that operating savings of two General Motors Diesel switchers in 115 months of service total well over twice the

original cost of the units. As of July 1, these locomotives had worked a total of 119,780 hours — combined availability, 95.5%.

GENERAL MOTORS
LOCOMOTIVES

ELECTRO-MOTIVE DIVISION

GENERAL MOTORS • LA GRANGE, ILL.

Home of the Diesel Locomotive



1933 KODAK SAFETY FILM

"BUFFALO" UNIT BRAKE BEAM



NEVER UNDERESTIMATE THE WORD

"BUFFALO"

**WHEN YOU THINK OF
UNIT BRAKE BEAMS**

- "Buffalo" is the ORIGINAL Unit Brake Beam
- "Buffalo" is the TIME-TESTED Unit Brake Beam
- "Buffalo" is the SERVICE-TESTED Unit Brake Beam

Since 1937 more than 310,000 of these sturdy, solid-truss Unit-type "Buffalo" Brake Beams have been bought by 86 railroads and private car lines.

Less than 1/10 of 1% of these beams were specifically bought for stand-by stock or repairs.

NO OTHER BRAKE BEAM CAN APPROACH THAT RECORD! "Buffalo" Units definitely STAND UP.

BUFFALO BRAKE BEAM CO.

140 Cedar Street

New York

RAILWAY AGE

With which are incorporated the Railway Review, the Railway Gazette, and the Railway-Age Gazette. Name Registered in U. S. Patent Office.

IN THIS ISSUE

EDITORIALS:

Who Will Fight for Private Enterprise?	35
Porcelain Industry Comes to Grips With Loss and Damage	36
Public Airing Brings Relief from Excess-Crew Law ..	36
Who Should Build the Cars?	37
Is the Answer "Engineered" Track?	37

GENERAL NEWS	55
--------------------	----

OPERATING REVENUES AND OPERATING EXPENSES	74
----------------------------------------------------	----

REVENUES AND EXPENSES	76
-----------------------------	----

GENERAL ARTICLES

Know-How and Equipment Will Keep Canadian National Open During Coming Winter, by J. W. Risk	38
Referee's Award Attacks N.R.A.B. Procedure	41
Purchases Head for \$3 Billion Mark	42
The Katy Shows Off Its Territory	44
Railroads Present Case for Freight-Rate Increase	46
Central of Georgia Grill Car	50
New Great Western Head Likes Owner-Management	53

Published each Saturday by the Simmons-Boardman Publishing Corporation, Orange, Conn., with Editorial and Executive Offices at 30 Church Street, New York 7, N. Y., and 105 W. Adams Street, Chicago 3, Ill.

Washington 4, D. C.: 1081 National Press Building—Cleveland 13: Terminal Tower—Seattle 1: 1038 Henry Building—San Francisco 4: 300 Montgomery Street, Rooms 805-806—Los Angeles 14: 530 West 6th Street—Dallas 4: 2909 Maple Avenue.

Samuel O. Dunn, Chairman and President. James G. Lyne, Executive Vice-President. S. Wayne Hickey, C. Miles Burpee, H. H. Melville, C. W. Merriken, F. C. Koch, R. E. Thayer, H. E. McCandless, Vice-Presidents. John R. Thompson, Western District Sales Manager. J. S. Crane, Vice-President and Secretary. J. T. DeMott, Treasurer. Ralph E. Westerman, Arthur J. McGinnis, Assistant Treasurers.

C. Miles Burpee, Business Manager.
Subscriptions including 52 regular

weekly issues, and special daily editions published from time to time in New York or in places other than New York, payable in advance and postage free. United States, U. S. possessions and Canada: 1 year, \$6.00; 2 years, \$10.00; other countries not including daily editions in Western Hemisphere 1 year \$10.00; 2 years \$16.00; other countries 1 year \$15.00; 2 years \$25.00. Single copies, 50 cents each, except special issues.

H. E. McCandless, Circulation Manager, 30 Church Street, New York 7.

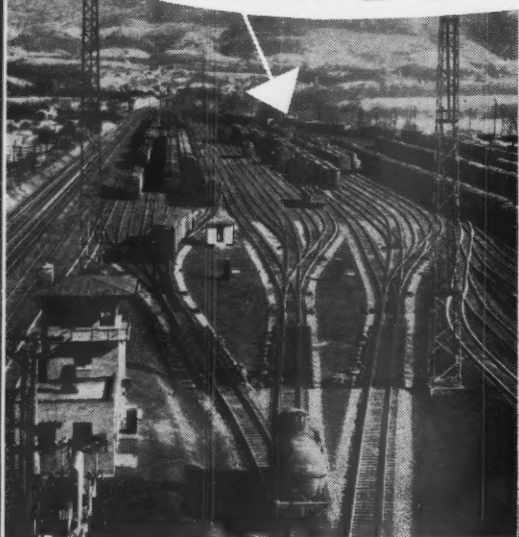
Railway Age is a member of Associated Business Papers (A. B. P.) and Audit Bureau of Circulation (A. B. C.) and is indexed by the Industrial Arts Index and by the Engineering Index Service.
PRINTED IN U. S. A.



LARGE

SMALL

—“UNION” *Car Retarders*



In both large and small yards you can profit by using “Union” Electro-pneumatic Car Retarders. Because maximum hump capacity is available at all hours, incoming trains can be accepted promptly . . . traffic flows smoothly and quickly into classification tracks regardless of weather conditions . . . new trains are made up rapidly for early departure.

Remember, too, that the increased capacity provided by the retarders can make it possible to transfer work to the retarder-equipped yard from other yards.

Why not let one of our representatives show you the exclusive engineering features of “Union” Electro-pneumatic Car Retarders . . . work with you in planning your new yard?

UNION SWITCH & SIGNAL COMPANY



WEEK AT A GLANCE

THANKSGIVING: As a local by-product of last week's national election, California railroads have good reason to celebrate the approaching Thanksgiving holiday. For, as reported in one of our news items, California voters, in a state-wide referendum, wiped off the statute books the state's antiquated excess crew law, which had been costing the four largest California railroads around \$3,000,000 a year for employment of unneeded brakemen. Under present-day conditions, as pointed out in the *Railway Age* of October 23, the law, while making no permanent or important contribution to total railroad employment, actually reduced, rather than increased, safety of railroad operation. Even more significant, however, than the financial saving, is the story of the campaign to convince the public that the law was both unsound and unjust—a story which is briefly outlined in an editorial on page 36. The campaign, and its result, afford positive proof that on some occasions at least railroad problems can be successfully presented to leaders of public opinion and to the public.

N.R.A.B.: A short feature article on page 41 reports the "sharp criticism" leveled at the First Division of the National Railroad Adjustment Board by H. S. Lattimore for its enforcement of an "unwise" provision in its procedure for handling disputes. A few more men with Mr. Lattimore's courage might be instrumental in obtaining badly needed reforms in the board's procedure and even in the law under which it operates.

THE KATY BOOSTS ITS TERRITORY: Nearly all railroads, quite understandably, like to "show off" the territory they serve. And the Missouri-Kansas-Texas believes in doing it by action, and in a big way. Last month it took a hand-picked group of newspaper men, writers and analysts on a nine-day, 3,100-mi. tour of its territory on a 13-car special train which visited 12 major cities in the booming Southwest. The trip is described and illustrated in an article beginning on page 44.

WHO WILL FIGHT: Our leading editorial this week points out that the late but unlamented presidential campaign should serve as a warning to business *not* to depend on politicians of *any* party to educate or lead public opinion in a direction favorable to private enterprise. The fight for the private enterprise system, the editorial points out, must be lead by men who believe in that system in principle. Substantially similar views are expressed in a quotation on page 54 from an article by William H. Stauffer of the Virginia State Chamber of Commerce.

PRESIDENTIAL YEAR: Not only in national politics, but in the railroad industry as well, 1948 is proving to be a presidential year. One of the major roads with a new chief executive is the Chicago Great Western, which is now headed by Grant Stauffer, coal executive from Kan-

sas City, Mo. Mr. Stauffer's election was reported in a recent issue of *Railway Age*, and in this issue, on page 53, we present a more detailed review of his business career, his ideas, and his policies.

BASING POINTS: The long-awaited hearings before the Senate Trade Policies Committee on the disruption of business caused by the Supreme Court's so-called basing point decision began at Washington on November 9. The first testimony is reported in our news columns.

THE RAILROAD CASE: On November 30 the railroads will present to the Interstate Commerce Commission their case for an interim freight-rate increase of 8 per cent and a permanent increase of 13 per cent. In an article beginning on page 46 we abstract several of the 20 statements with which the railroads will support their request. These statements offer convincing evidence that the full 13 per cent raise is badly needed to offset increased costs and assure continuance of modernization programs; also that railroad rates and railroad profits are both lagging far behind the upward trend of industrial prices and industrial earnings.

\$3 BILLION CUSTOMER: Our monthly summary of railroad purchases, on pages 42 and 43, indicates that railroad purchases in 1948 may reach the astronomical total of \$3,000,000,000. That makes the railroads a pretty good customer of many different industries.

CENTRAL OF GEORGIA GRILL CAR: An illustrated article beginning on page 50 describes a new combination grill-lounge car recently rebuilt by the Central of Georgia in its own shops. The article contains a partial list of manufacturers who supplied materials and equipment. Other modernized passenger equipment for service on the Reading is illustrated in our news pages.

WHEN WINTER COMES: When winter comes, the railroads' truck competitors roll merrily on over highways and streets cleared of snow by state and city employees. But the railroads must do their own snow fighting—must cope through their own resources and without government aid, with the engineering, operating and financial problems that come with the first snowfall. After last winter, especially, officers of northern railroads will find much valuable information in our interestingly illustrated article on the Canadian National's snow-fighting methods and equipment. The article begins on page 38; it is an abstract of a paper delivered to the Roadmasters' and Maintenance of Way Association by J. W. Risk, work equipment superintendent for the C. N.'s Central region.

IN TOWERS... ON TRAINS...



SPEEDING TRAFFIC WITH GREATER SAFETY. In this control tower, Okonite cables are used in signal circuits serving an interlocking that combines remote and automatic control. It is one of many Okonite signal wire installations.



CAR BUILDERS SPECIFY MILLIONS OF FEET of Okonite car wire for new rolling stock — in circuits serving lighting, heating and air conditioning on cars. Locomotives are served by Okonite cab wire.

AT TERMINALS



...there's a wide range of Okonite cables for many a railroad job

C & N W'S OKONITE WIRING WAS INSTALLED IN 1910. In this gateway to a 10,000-mile system, the main Chicago station of the "North Western," Okonite wire, installed in 1910, is still intact.

SERVICE in control towers, in modern cars and as station wiring are three specific jobs in which individual Okonite wires and cables have proved themselves. There are many others.

Among them are track wire applications, case and instrument wiring, yard wiring and floodlighting, centralized traffic control, railroad electrification. And Okonite Parkway Cables, buried directly in the ground, supply power along the right of way — to interlockings, for example.

Playing a prominent part in the successful railroad use of these cables are two important cable components — Okonite insulation and Okoprene cable covering. Okonite insulation, made with Up-River fine Para rubber, is described in Bulletin RA-101, while Okoprene protection, with the many Okoprene characteristics that make for long cable life in specific railroad assignments — is covered in Bulletin RA-2048. For a copy of each or either, please address The Okonite Company, Passaic, N. J.

6974

OKONITE



insulated wires and cables

THE BEST CABLE IS YOUR BEST POLICY

RAILWAY AGE

EDITORS...
Samuel O. Dunn and James G. Lyne

MANAGING EDITOR...
C. B. Tavenner

WESTERN EDITOR...
Neal D. Howard

NEWS EDITOR...
Gardner C. Hudson

WASHINGTON OFFICE...
Walter J. Taft
Sherman Davis

TRANSPORTATION DEPARTMENT...
William H. Schmidt, Jr.
Robert G. Lewis

MECHANICAL DEPARTMENT...

C. B. Peck
E. L. Woodward
H. C. Wilcox
C. L. Combes
G. J. Weihofen

ENGINEERING DEPARTMENT...

M. H. Dick
Walter L. Turner, Jr.
Henry E. Michael
Norris V. Engman

PURCHASES & STORES DEPARTMENT...

John W. Milliken

EQUIPMENT & FINANCIAL NEWS...

Fred C. Miles

SIGNALING AND COMMUNICATIONS DEPARTMENT...

John H. Dunn
Maurice Peacock

ELECTRICAL DEPARTMENT...

Alfred G. Oehler

WESTERN NEWS DEPARTMENT...

George R. Johnson

ASSOCIATE EDITOR...

Charles Layng

LIBRARIAN...

Edith C. Stone

EDITORIAL ASSISTANT...

Elaine C. Farrar

WHO WILL FIGHT FOR PRIVATE ENTERPRISE?

The surprising result of the election has presented to private enterprise more forcibly than ever the question as to what it should do to be saved. If the Republicans had nominated a candidate for president with a record of opposition to all socialistic policies and he had vigorously stumped the country for real and free private enterprise subject only to regulation conducive to its efficient functioning, probably the candidate and his party would have been defeated and the defeat would have been attributed to their being "reactionary." But the Republicans did not nominate that kind of a candidate, their candidate did not make that kind of a campaign, and they lost an election which four months before it did not seem possible they could lose even by the most calculated and proficient blundering.

The campaign and its result are a warning to business not to depend on politicians—any politicians—to educate and lead public opinion favorably to business. The socialistic domestic policies of the New Deal started a controversy which has raged for fifteen years on the radio and in the press between advocates of a socialistic planned economy and defenders of private enterprise. Ever since he became President Mr. Truman has been urging upon Congress the adoption of more socialistic policies. The prosperity the country has had since the war has been made possible by the defeat of

the policies endorsed and advocated by Mr. Truman. The public sentiment which defeated these policies and elected a Republican Congress in 1946 was created principally by men in private life who have fought the New Deal from its inception. The candidates of the Republican party in 1948 could have appealed to this sentiment and sought to increase and strengthen it and gain its energetic support by attacking the New Deal domestic policies inimical to private enterprise that had been sponsored by Presidents Roosevelt and Truman. President Truman repeatedly challenged Mr. Dewey to discuss the vitally important issues presented by these policies, but Mr. Dewey declined the challenge, and confined himself to glittering generalities and pious platitudes. Perhaps this was because he feared he would lose votes by criticizing socialistic policies; perhaps because he believed in them as much as Mr. Truman.

The Main Dependence

At any rate, it is now plainer than it ever was before that for the real fighting for private enterprise the main dependence must be placed on men in private life who are willing to write and speak in its behalf because they believe in it *in principle*, and it is the *duty* of business to itself and to the nation to give them all needed support.

Such support can be given in various ways. It can be given by contributing to such radio and other activities as those of President Benson of Harding College and Samuel B. Pettengill and ceasing to sponsor radio broadcasters who promote socialism. It can be done by supporting national organizations such as the National Association of Manufacturers and the Tax Foundation. It can be done by practicing more discrimination in the placing of advertising in newspapers and magazines.

Some publications have no editorial policy at all regarding the paramount issue of socialistic policies versus private enterprise. Some advocate some or most socialistic policies. Some oppose most or all socialistic policies. Business has a duty to itself and the nation to discriminate in placing its advertising in favor of publications having a definite and courageous policy of fighting for private enterprise. If business won't provide the means of fighting the war for private enterprise, who does it think will?

PORCELAIN INDUSTRY COMES TO GRIPS WITH LOSS AND DAMAGE

The Porcelain Enamel Institute devoted a quarter of its recent annual sales and merchandising conference in Chicago to a serious discussion of the problem of loss and damage in transit. As pointed out in *Railway Age* of October 16, page 69, plumbers' goods and refrigerators—the chief enamel-surface products—took first and second rank, respectively, among commodities on which freight loss and damage in the first quarter of this year exceeded that of the corresponding portion of 1947, showing increases of 119.1 and 104.6 per cent, respectively.

C. D. Clausson, president of the institute, lent strong support to the meeting, and Ralph Bisbee, manager of quality control for Westinghouse Electric Corporation at its appliance plant, was in charge of the technical elements of the conference, which included exhibits of testing apparatus and the presentation of standard test procedures. A. L. Green, Freight Claim division of the Association of American Railroads, representing the railroads, presented the keynote speech.

It is significant that a large industry, on its own initiative, should devote so much of the limited time available at its annual meeting to freight loss and damage. There is reason to believe that these manufacturers are fearful lest the poor record of the industry in claims may result in an adjustment in classification ratings and commodity rates to compensate the railroads for the unfavorable loss

ratio of enameled ware. If this be so, the wide publication of accurate and timely figures on loss and damage claims—by commodities—should serve to induce similar intra-industry concern and action by the producers of other products. Voluntary action, motivated by intelligent self-interest, can work wonders.

PUBLIC AIRING BRINGS RELIEF FROM EXCESS-CREW LAW

The four principal railroads operating in California have demonstrated that legislation granting unwarranted special favors to privileged groups can be modified if it is brought into broad daylight for everybody to see, even when labor unions are the groups so favored. On November 2, the California voters approved a referendum amending the more objectionable provisions of the state's 37-year-old excess-crew law—a statute which might have had some merit at the time of its enactment, but which is today as out-of-date as a wood-burning locomotive. The California carriers achieved this result by the simple expedient of bringing the law to the attention of the people—showing how their pocketbooks were affected.

The issue was first taken to chambers of commerce, newspapers, shippers, and consumer groups. Fortright presentation of the facts quickly won their support and made possible a petition with sufficient signers, and of such statewide geographic distribution, as to place a proposition calling for the amendment of the law on the November 2 ballots under the state's initiative and referendum law. The petitioners formed the California Committee Against Featherbedding, headed by State Senator George J. Hatfield, to campaign for the amendment. This committee made it its purpose to demonstrate to the voters the absurdity of the law's arbitrary requirement for employing excess manpower on freight trains operating in the state. The committee explained how the \$3,000,000 paid annually to these "law" crewmen was clearly a burden on the state's shippers and consumers. Over 400 pre-election talks were made by members of the committee. A 29-page "exposé" of the featherbedding provisions of the law was given wide distribution. The committee's efforts were so effective that their proposed amendment was the most widely talked about of any of 19 propositions on the ballot.

More than a dozen states still carry excess-crew laws on their statute books. It is doubtful that the general public in any of these states is even re-

motely aware that such legislation exists. It is true that not all states possess the direct machinery of the plebiscite for remedying bad laws. It is also true that excess-crew laws in other states may not be as palpably absurd as the California law was. But the technique used by the California carriers in starting off a popularly supported campaign for necessary legal repairs clearly points the way by which success may be achieved.

WHO SHOULD BUILD THE CARS?

There has been a large—indeed startling—shift in the ratio of freight car orders placed with railroad company shops, in comparison with the volume going to contract builders. The figures as compiled by the American Railway Car Institute are:

New Freight Car Orders				
	1947	%	10 Mos. 1948	%
Car Builders	94,072	77.29	51,508	60.5
Railroad Shops	27,635	22.71	33,635	39.5
Total	121,707	100.00	85,143	100.0

On Order and Undelivered (Backlog of Orders)				
	Dec. 31, 1947		Oct. 31, 1948	
		%		%
Car Builders	89,372	74.61	71,720	64.38
Railroad Shops	30,414	25.39	39,685	35.62
Total	119,786	100.00	111,405	100.00

The decision whether to place a specific order for cars with a company shop or an "outside" builder is made, presumably, on immediate economic considerations—that is, a comparison of the price asked by the contract builder with the estimate on probable cost submitted by the management of the company shop. In any given isolated instance—provided the company-shop estimates accurately reflect total costs—there would be no reason for other action than giving the order to the low bidder, all other conditions being equal. When, however, a large number of individual decisions combine to give the total result of reducing the car-building industry to a ratio of less than $\frac{3}{5}$ of the total market, a question of overall industry policy arises.

Just how large an "outside" car-building industry is it desirable to maintain, in the long-interest of the railroads? It is conceivable that the answer to that question could be different from that provided by the sum of isolated individual decisions—each of which might be wholly justifiable when viewed alone. At any rate the figures and their implications deserve attention and consideration.

IS THE ANSWER "ENGINEERED" TRACK?

Under the impetus of rising costs of materials and labor, track-maintenance men and engineers, in alliance with researchers and manufacturers of both materials and machines, have made important innovations which reduce the man-hours required to maintain track. Further progress in this direction is to be expected, but there is a point beyond which the savings will be on a diminishing scale, with present track construction. Yet there is the inexorable pressure of rising wages to be contended with. What is to be done?

Increases in wages and other costs have to some degree been offset by higher freight and passenger rates, but this solution obviously can go only so far. In countries where the railroads are nationalized—which means most of the world outside of the United States—the engineer can shrug off the problem of higher costs, knowing that the taxpayer will pick up the check, however large it may be. Under free enterprise, management is forced to exercise its ingenuity to keep outlay safely within income.

The ideal solution would be a track structure built so strongly that it would require no attention whatever—a goal which is impracticable if not impossible. Wherever moving loads are handled on wheels the carrying structure is subject to friction, impact and fatigue, so that indefinite life without repairs and occasional renewal is unattainable. Nevertheless, the ideal of permanence might still be established as a goal even if its complete attainment is not to be expected.

One track man who is endeavoring to liberate his thinking from too much inhibition by precedent and tradition is talking in terms of what he calls an "engineered" track structure. What he appears to have in mind is a structure *designed* in accordance with scientific principles governing the action and reaction of materials under moving loads. It might be said that this very thing is the objective of the present program of scientific research now being carried out by the railroads through the Association of American Railroads. To this the track man would reply that the research program is principally concerned with improving or strengthening details or parts of the structure, and gives little heed to the possibility that changes in the total concept may be in order.

In the jobs-wanted columns of a daily newspaper an applicant for employment asserted that he had "his head in the clouds and his feet on the ground." A track engineer indulging occasionally in a flight of fancy into the upper atmosphere of speculation might prove ultimately to be also the man with his feet most solidly on the ground.



One of the Canadian National's 13 rotaries in action. These machines are invaluable in heavy drifts, but their slow operating speed makes their use uneconomical except for conditions that cannot be cleared with ordinary nose or wing plows

KNOW-HOW AND EQUIPMENT WILL KEEP CANADIAN NATIONAL OPEN DURING COMING WINTER

Experienced snow fighter tells how it has been done in the past and what methods and machines are ready to be put into action—Several new units scheduled to play big roles



The wing plows on the C.N.R.—a total of 258—are of two types—the Russell, with rigid-nose construction (shown above) and flanger attachment just ahead of the rear trucks, and the drop-nose type, which can be lowered to flange out between the rails

By J. W. RISK
Superintendent Work Equipment, Central Region
Canadian National
Toronto, Ont.

During the last 10 years, 6.14 cents of each dollar of maintenance-of-way expenditures on the Canadian National have been spent for snow removal. It is a difficult and costly job to keep our tracks open in winter in some territories, but we have long accepted the situation as a challenge and, based on many year's experience, using a large amount of effective equipment, have been successful in keeping traffic moving with minimum delay through periods of even the most severe weather. The basis of our success is extensive preparation, proper mechanized equipment always kept in readiness, a trained personnel, and close coordination among the various departments involved.

Not all the territory served by the Canadian National is buried deeply in snow every winter. In fact, the regions where heavy snowfall can be expected, with considerable accumulation on the ground, are more restricted than is commonly supposed.

Adapted from a paper presented before the annual convention of the Roadmasters' and Maintenance of Way Association in Chicago, September 22.



Jordan spreaders, with their powerful wings, do the work of an army of men and are used extensively in yards. Here, they push the snow from one track to the next, successively throughout the width of the yard, to a point where it can be left piled or loaded

From the Atlantic coast, 800 mi. westerly to Cornwall, Ont., and 500 mi. northwest of Cochrane, Ont., the average annual snowfall is 113.5 in. This gradually diminishes as one travels westward from Cornwall and, at Toronto, 265 mi. distant, it is only 61.9 in.

In the Southampton and Owen Sound (Ont.) areas, 160 mi. north of Toronto, conditions are more severe and the average snowfall is 126.2 in. Similar conditions prevail to a point west of Lake Superior.

Across the prairies the snowfall is comparatively light, the average being less than 54 in., while in the mountain and upper Fraser River areas of British Columbia the average annual snowfall exceeds 200 in.

But snowfall in inches doesn't tell the whole story; other factors, such as density of snow, extremely low temperatures, frequency of high winds, and the character of the terrain through which the railway operates, all have a definite relationship to the severity of the snow-removal problem.

Equipment for Every Snow Condition

The Canadian National has the following large units of mechanized equipment for snow-clearing operations: 258 wing plows equipped with drop-nose or flanger attachments; 13 rotary plows; 190 flangers; 46 Jordan spreaders; 3 crawler snow loaders; 3 Sicard snow blowers; 30 bulldozers, and 1 Barber-Greene rail-mounted snow loader and melting tank.

Diesel-powered crawler cranes, locomotive cranes, tractors with broom or scraper attachments, and motor trucks of three and five-ton capacity, equipped with plows—all normally used in other operations—are

diverted to snow clearing as the urgency of conditions may require.

Our snow plows are of three types. One is the Russell wing plow, of rigid-nose construction, with flanger attachment just ahead of the rear trucks. The second type is a wing plow, with drop nose which can be lowered to flange out between the rails. With a crew of two men, these plows may be operated at the permissible timetable speeds of freight trains.

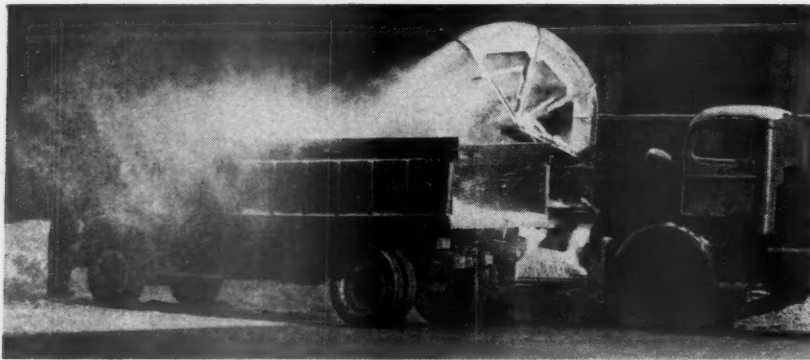
The rotary-type plow is equipped with cutting blades powered by an independent steam boiler. This type plow is used for clearing drifts that are too deep and compact for the conventional-type plow to handle. Its operating speed is from two to five miles an hour, depending on the depth and density of the snow.

Flangers are standard equipment on all Canadian railways. They consist of a small plow attachment mounted under caboose-type cars, usually between the trucks. This small plow can be lowered or raised by an air-control lever located in the cupola.

Flangers are used when conditions do not justify plow operation. Their purpose is to clear heavy track conditions, reduce the tendency for ice to form between the rails, and permit the necessary inspection of the track. They are operated at the rear of freight or mixed trains, with a crew consisting of a flanger foreman and helper.

Clearing Yards and Terminals

No part of the operation is more important than snow removal from yards and terminals. This work requires extensive preparation, proper mechanized



The on- or off-track snow blower, used wherever snow is piled—on roadways, driveways, other station areas, or in yards—can go anywhere and load into anything, or blow the snow out into the clear. Its capacity is approximately 15 cu. yd. per min.

equipment manned by trained operators, and constant supervision.

Jordan spreaders are used extensively to clear snow and ice from yard tracks. Ice-cutting teeth are sometimes attached to the nose of the spreader for the removal of snow from between the rails. This piece of equipment has the advantage of being equally effective in ballasting and ditching operations.

Rugged, truck-mounted snow blowers, designed for on- or off-track operation, are used to clear snow from roadways, freight house driveways and other station areas. They will blow it away if space permits, or load it into trucks or open-top railway cars. In yards, the snow is often spread across five tracks by a spreader, into a windrow, and then loaded into open-top cars by the snow blower.

Crawler-mounted, conveyor-type snow loaders,

equipped with end and side discharge or swivel boom, are used in a manner similar to the blower. They are particularly adaptable for loading trucks in restricted roadway areas. Bulldozers are used mainly for clearing roadways and other areas where the snow can be pushed into the clear. They are also used for pushing back and leveling off snow dumps.

Large-Capacity Snow Melter Effective

The Barber-Greene snow-loader and melter is a relatively recent development, consisting of a heavy-duty, dual-conveyor loader and a 12,000-gal. melting tank, mounted on two railway cars. This unit is propelled and serviced with steam by a locomotive—one with a grate area of 75 sq. ft., boiler pressure of 200 lb., and heating surface of 4,600 sq. ft., having been found most



The Barber-Greene snow loader and melter, with its dual loading conveyors and 12,000-gal melting tank, has proved highly effective at the Montreal terminals. With a loading capacity of 30 cu. yd. per min., this unit has cut costs to less than half that of other means

satisfactory for this purpose. It is particularly adapted to the removal of snow in terminal yards, where it replaces other methods requiring the use of work trains, loaders or trucks.

Between January 20 and March 5 of last winter, this machine was in use for 21 days in our Montreal terminal, operating 32 shifts of 10 hr. each. Within this period it disposed of 37,140 cu. yd. of snow, this being equivalent of three tanks per 10-hr. shift, or a total of 1,080 cu. yd. per shift. The overall cost was 33 cents per cubic yard, which is less than one-half the cost by other means of removal.

Crawler-type off-track cranes also are used to dispose of snow at terminal yards and other locations, loading into open-top cars. They are likewise used for unloading cars at snow dumps. Where the layout is suitable, a Lidgerwood, with a ballast plow, is used to unload snow from ballast cars. Small two and four-wheel, lightweight tractors, with plow and broom

attachments, are used to expedite the removal of snow from important station platforms.

Snow-melting pits have been constructed at our larger locomotive repair shops to eliminate excessive truck haul. Live steam at 90-lb. pressure—supplied from stationary power plants—is used for melting purposes. The pits are full of water when in operation, and the steam agitates the water and keeps it at sufficiently high temperature to melt the snow. Steam pipe installations are also used at many turntable pits and transfer tables, and have proved satisfactory in keeping tables in operation through difficult storm conditions.

The use of mechanized equipment has brought about a definite improvement in snow clearing methods on the Canadian National—but we are satisfied that still further progress is possible, and will be obtained through continued study and the proper application of man and machine.

REFEREE'S AWARD ATTACKS N.R.A.B. PROCEDURE

Sharp criticism was leveled at the National Railroad Adjustment Board's First Division for its enforcement of an "unwise" provision in the procedure for handling disputes, by H. S. Lattimore, Texas attorney, during his recent tenure as neutral referee. Mr. Lattimore, a former judge of a district court in Texas and a former member of the Texas Court of Civil Appeals, was appointed last May 20 to hear 35 cases deadlocked before the board. In his findings on one case, which involved a dispute over reinstatement of an employee dismissed three and one-half years earlier, * Referee Lattimore took exception to the division's practice of refusing to permit pleading of any additional facts not incorporated in the original submissions of the carrier or employees once entered.

In the instant case, both parties had failed to mention specifically in their respective submissions whether conferences had or had not been held between the claimant or his representative and the carrier, as required by section 3(i) of the Railway Labor Act. Hence, the board could not find that such conference had been held, and was required to dismiss the case, without prejudice to its refile if and when properly processed on the railroad property. The carrier members contended that no such conference had been held, while labor members declared that a conference had been held or requested. Had the division permitted the pleading of additional evidence, the case could have been settled forthwith. Divisions 2, 3 and 4 of the board, in contrast to Division 1, permit pleading of additional facts pertinent to the case.

In the findings in the instant case, Referee Lattimore made the following observations:

*First Division Award No. 12284, Docket No. 21638, dated July 19, 1948.

This referee believes it unwise that this board will not allow amendment of, or supplement to, the original 'submission,' as the original instruments filed with this board, which state the facts and contentions of the respective parties, are called. These submissions are required to be filed without either party having previous knowledge of the other submission. Justice would be promoted, the dispatch of business hastened, and the time of this board, the tax funds and the funds of carriers and labor organizations conserved, if supplement be allowed in order that the truth be accurately and promptly ascertained.

This docket is a perfect illustration. If we hold that the notice of intent to file was met sufficiently, and if we hold that the answer of the carrier suffices to furnish the names of the parties to this dispute, we still do not avoid the indications in the record that the statutory conference was not held.

If in fact that conference was held and amendments here permitted to show it, we could now decide the case on its merits, instead of having it come back here later for repetition of the time and money expended on this hearing, and the disappointments to both carrier and claimant occasioned by the delay.

Railway Age has from Mr. Lattimore the following statement relative to his belief that there exists a great need for more satisfactory handling of disagreements between the railroads and the brotherhoods:

"I am a firm believer that the hope of democracy for a satisfactory operation of its railroads and other utilities lies in adequate arbitration. Believing as I do in private ownership and the beneficence of organization in labor, we ought to leave no stone unturned to make our arbitration machinery so adequate that every controversy will be fairly arbitrated, and both capital and labor will know beyond doubt that the machinery set up guarantees a fair result."

PURCHASES

HEAD FOR \$3 BILLION MARK

1948 RAILWAY PURCHASES*

	August (000)	Eight Month Totals 1948 (000)	Eight Month Totals 1947 (000)
Equipment**	\$19,452	\$503,905	\$417,274
Rail	8,965	60,121	57,308
Crossties	9,114	51,864	66,392
Other Material	103,620	798,576	692,220
Total from Manufacturers	\$141,151	\$1,414,466	\$1,233,194
Fuel	71,638	560,472	435,845
Grand Total	\$212,789	\$1,974,938	\$1,669,039

*Subject to revision

**Amount placed on order

August purchases, including equipment orders and fuel, raised the total of railroad expenditures for equipment, material, supplies and fuel in the first 8 months of the year to \$1,974,938,000, an increase of 18 per cent over the total at the end of August last year. At this rate, with four months to go, total purchases, including equipment orders, are likely to be near the \$3 billion mark.

Worthy of note in the August purchases is the continued rise in expenditures for rail and crossties. Conditions which have been noted in earlier issues of *Railway Age* caused crosstie buying to get off to a rather slow start in the early months of this year. Beginning in May, however, the volume of tie purchases began to move upward, reaching a total of \$9,114,000 in August.

Rail purchases on the other hand started off well in the early months but took an abrupt nose dive in the coal strike month of April. They have moved steadily upward since May, and in August reached \$8,965,000, bringing the total for the year to \$60,121,000.

August equipment orders of \$19,452,000 brought the eight month estimated total for locomotives and cars to \$503,905,000, an increase of 21 per cent from orders placed as of the last of August in 1947. Included in August orders are an estimated \$1,300,000 for 13 Diesel-electric units, approximately \$3,000,000 for thirty passenger train cars, and \$15,152,000 for 3,788 freight train cars.

AUGUST* PURCHASES OF MANUFACTURED GOODS (Excl. Equip. & Fuel)

August '48 Compared to Other Augusts (000)			August '48 Compared to Other Months '48 (000)			Eight Month Totals '48 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1942	\$ 65,085	+87	Jan.	\$105,827	+15	1942	\$586,656	+55
1943	75,266	+62	Feb.	103,390	+18	1943	539,194	+69
1944	90,831	+34	Mar.	121,557	—	1944	682,591	+33
1945	87,342	+39	Apr.	115,811	+ 5	1945	688,010	+32
1946	93,522	+30	May	108,914	+12	1946	634,031	+44
1947	104,657	+16	June	119,229	+ 2	1947	815,920	+12
1948	121,699		July	114,134	+ 7	1948	910,561	
			Aug.	121,699				

AUGUST* PURCHASES OF RAIL

August '48 Compared to Other Augusts (000)			August '48 Compared to Other Months '48 (000)			Eight Month Totals '48 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1942	\$4,620	+ 94	Jan.	\$7,409	+21	1942	\$39,132	+54
1943	4,396	+103	Feb.	8,200	+ 9	1943	35,961	+67
1944	6,358	+ 41	Mar.	8,661	+ 4	1944	51,213	+17
1945	5,977	+ 50	Apr.	5,452	+64	1945	48,625	+24
1946	6,634	+ 35	May	6,716	+33	1946	36,500	+65
1947	7,625	+ 18	June	7,759	+16	1947	57,308	+ 5
1948	8,965		July	6,959	+29	1948	60,121	
			Aug.	8,965				

AUGUST* PURCHASES OF CROSSTIES

August '48 Compared to Other Augusts (000)			August '48 Compared to Other Months '48 (000)			Eight Month Totals '48 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1942	\$5,609	+62	Jan.	\$5,623	+62	1942	\$45,513	+14
1943	8,156	+12	Feb.	4,630	+97	1943	50,963	+ 2
1944	7,532	+21	Mar.	5,861	+56	1944	57,691	+10
1945	6,594	+40	Apr.	5,857	+56	1945	47,241	+10
1946	8,032	+13	May	6,129	+49	1946	58,460	+11
1947	9,300	— 2	June	7,101	+28	1947	66,392	+22
1948	9,114		July	7,549	+21	1948	51,865	
			Aug.	9,114				

*Subject to revision

AUGUST* PURCHASES OF OTHER MATERIAL

August '48 Compared to Other Augusts (000)			August '48 Compared to Other Months '48 (000)			Eight Month Totals '48 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1942	\$54,856	+89	Jan.	\$ 92,795	+12	1942	\$502,011	+59
1943	62,714	+65	Feb.	90,560	+14	1943	452,270	+77
1944	76,941	+35	Mar.	107,035	-3	1944	573,637	+39
1945	74,771	+39	Apr.	104,502	-1	1945	562,144	+42
1946	78,856	+31	May	96,069	+8	1946	539,071	+48
1947	87,732	+18	June	104,369	-1	1947	692,220	+15
1948	103,620		July	99,626	+4	1948	798,576	
			Aug.	103,620				

AUGUST* PURCHASES OF FUEL

August '48 Compared to Other Augusts (000)			August '48 Compared to Other Months '48 (000)			Eight Month Totals '48 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1942	\$35,468	+102	Jan.	\$73,733	-3	1942	\$274,708	+104
1943	45,403	+58	Feb.	70,438	+2	1943	351,199	+60
1944	47,954	+49	Mar.	69,181	+4	1944	401,397	+40
1945	45,402	+58	Apr.	58,524	+22	1945	374,618	+50
1946	49,419	+45	May	73,232	-2	1946	354,768	+58
1947	56,585	+27	June	75,548	-5	1947	435,845	+29
1948	71,638		July	68,178	+5	1948	560,472	
			Aug.	71,638				

AUGUST* TOTAL PURCHASES (Excl. Equip.)

August '48 Compared to Other Augusts (000)			August '48 Compared to Other Months '48 (000)			Eight Month Totals '48 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1942	\$100,553	+93	Jan.	\$179,560	+8	1942	\$ 861,364	+71
1943	120,669	+60	Feb.	173,828	+11	1943	890,393	+65
1944	138,785	+40	Mar.	190,738	+1	1944	1,083,988	+36
1945	132,744	+46	Apr.	174,335	+11	1945	1,032,628	+42
1946	142,941	+35	May	182,146	+6	1946	988,799	+49
1947	161,242	+20	June	194,777	-1	1947	1,251,765	+18
1948	193,337		July	182,312	+6	1948	1,471,033	
			Aug.	193,337				

AUGUST* INVENTORIES OF RAIL

August '48 Compared to Other Augusts (000)			August '48 Compared to Other Months '48 (000)			August '48 Compared to Other Augusts (000)			August '48 Compared to Other Months '48 (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change	Month	Amt.	% Change
1942	\$21,847	+37	Jan. 1	\$32,924	-9	1942	\$9,366	+59	Jan. 1	\$13,225	+12
1943	19,035	+57	Feb.	36,120	-17	1943	9,258	+60	Feb.	13,336	+11
1944	23,190	+29	Mar.	37,341	-20	1944	9,682	+53	Mar.	16,409	-9
1945	26,332	+14	Apr.	36,572	-18	1945	9,280	+60	Apr.	15,783	-6
1946	24,205	+24	May	31,911	-6	1946	11,460	+30	May	16,217	-8
1947	28,509	+5	June	30,767	-2	1947	9,881	+50	June	13,993	+6
1948	30,005		July	30,837	-3	1948	14,857		July	14,210	+5
			Aug.	30,005					Aug.	14,857	

AUGUST* INVENTORIES OF CROSSTIES

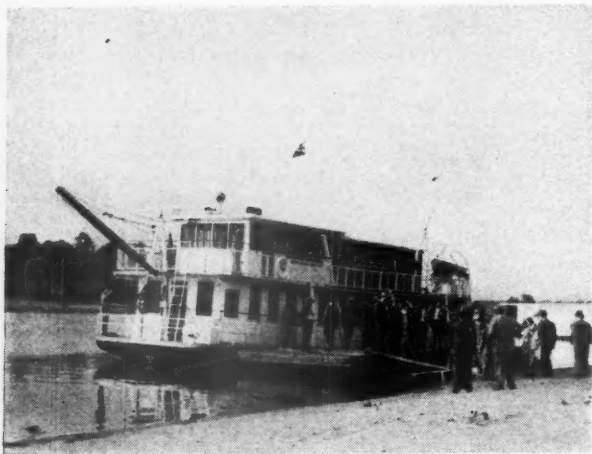
August '48 Compared to Other Augusts (000)			August '48 Compared to Other Months '48 (000)			August '48 Compared to Other Augusts (000)			August '48 Compared to Other Months '48 (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change	Month	Amt.	% Change
1942	\$58,520	+33	Jan. 1	\$92,300	-15	1942	\$50,580	+71	Jan. 1	\$66,388	+30
1943	57,536	+35	Feb.	93,492	-17	1943	58,216	+49	Feb.	66,727	+30
1944	75,004	+4	Mar.	98,843	-21	1944	64,515	+34	Mar.	65,071	+33
1945	66,422	+17	Apr.	96,782	-19	1945	56,248	+54	Apr.	64,153	+35
1946	78,698	-1	May	92,711	-16	1946	46,625	+86	May	62,094	+40
1947	86,066	-9	June	86,548	-10	1947	56,135	+54	June	72,512	+19
1948	77,952		July	82,143	-5	1948	86,636		July	83,946	+3
			Aug.	77,952					Aug.	86,636	

AUGUST* INVENTORIES OF OTHER MATERIAL

August '48 Compared to Other Augusts (000)			August '48 Compared to Other Months '48 (000)			August '48 Compared to Other Augusts (000)			August '48 Compared to Other Months '48 (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change	Month	Amt.	% Change
1942	\$394,600	+56	Jan. 1	\$560,703	+10	1942	\$534,913	+54	Jan. 1	\$765,540	+8
1943	376,295	+63	Feb.	570,201	+8	1943	520,340	+58	Feb.	779,876	+6
1944	422,002	+46	Mar.	577,078	+6	1944	594,393	+39	Mar.	794,742	+4
1945	449,821	+36	Apr.	587,390	+5	1945	608,103	+35	Apr.	800,680	+3
1946	458,774	+34	May	603,972	+2	1946	619,762	+33	May	806,905	+2
1947	558,119	+10	June	607,278	+1	1947	738,710	+12	June	811,098	+2
1948	614,271		July	610,025	+1	1948	823,721		July	821,161	+1
			Aug.	614,271					Aug.	823,721	

*Subject to revision

THE KATY SHOWS OFF ITS TERRITORY

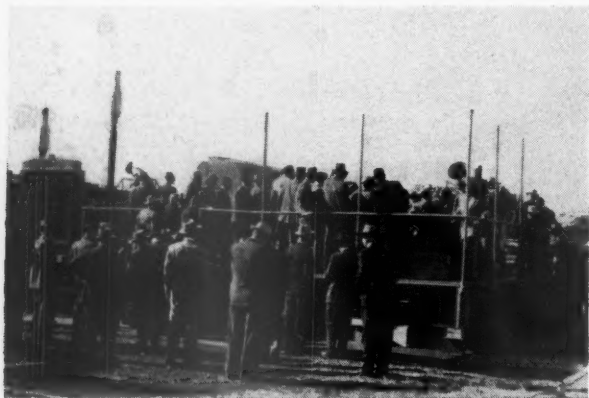


Katy press party boards Diesel-powered stern-wheeler for inspection of new man-made Lake Texoma, near Denison, Tex.



Big B-36's at Consolidated Vultee in Fort Worth, Tex., interested the party, which was escorted through the assembly line plant

An operating test of a new high-powered oil well drilling rig, having central controls, is made for special Katy party at Wichita Falls, Tex., in the heart of the oil region



Second press tour of booming Southwest takes newsmen and financial analysts to twelve cities, where the hospitality is "all out"

The Missouri-Kansas-Texas finds itself in the fortunate position of serving an area which is enjoying rapid industrial and commercial growth. Some of the points in Texas it serves are going through hectic full-blown booms, while others are building up at a slower pace. But almost every community in the Southwest is "going places."

The railroad is anxious that businesses and sources of capital realize the extent to which the Southwest has advanced industrially, and the area's current high pitch of building and expansion, so that they may take advantage of it and plan for future participation. The Southwest is now a land of great personal wealth, where this generation's millionaires are grown, and has the character, to an eye accustomed to the generally long apprenticeships and slow struggles to accumulate wealth common in older parts of the country, of a "never-never land." But the section still lacks sufficient amassed investment capital, of the type furnished by insurance companies, trust funds and banks, and needs the financial resources of New York, Chicago, Philadelphia, St. Louis and other centers to finance its development. Ranking with its rich natural resources is the territory's determination to develop industrially by the wise investment of private risk capital.

The Grand Tour Manner

On the evening of Saturday, October 9, a special 13-car M.-K.-T. train left the St. Louis Union Station for a 3,112-mi. tour of the road's territory. A hand-picked group of newspaper columnists, financial reporters, editors, magazine writers, financial analysts and engineering experts—100 in all—were comfortably ensconced thereon for a period of nine days, during which time they traveled most of the road's main stem and visited 12 representative cities.

Equipment comprised a full-length club car, diner, "buffer" baggage car, mechanical servicing car, dormitory car, all-room sleeping cars, and President Donald V. Fraser's business car at the rear. Accompanying the party throughout the tour was a panel

of Katy executives and public relations and passenger traffic officers, including Mr. Fraser, H. M. Warden, vice-president and general manager; J. F. Hennessey, Jr., vice-president—traffic; J. T. Mahaney, vice-president—accounting and finance; M. R. Cring, assistant to president—public relations (in charge of the tour); T. M. Evans, chief mechanical officer; V. V. Masterson, assistant director, publicity and advertising; H. F. Tate, Jr., advertising agent; J. R. Maguire, editor of the Katy's employees magazine; and C. J. Knapp, publicity representative. As the train proceeded over the system, other officers joined the party from time to time, including division superintendents, general agents, and engineering, mechanical and signal officers. R. J. Morfa, chairman of the board, whose headquarters and residence are in Dallas, and S. D. Sparkes, assistant to vice-president, participated for several days in the party's activities while in Texas.

Details of the tour were worked out several months in advance by the public relations staff, with the cooperation of the traffic department. Stopping points were carefully selected with a view to showing the guests a wide variety of industrial development of a permanent, rather than temporary boom, nature. Katy public relations men made numerous trips up and down the line "buttoning up" the details with chambers of commerce and other interests.

Local business men and civic authorities proved most eager to entertain and enlighten the party; the railroad's chief difficulty was to convince them that the visitors could not stay at each city for a week or so. At each stop, the party was met by buses or automobiles which whisked them, heralded by police sirens, to hotels for meals, or to plants and other points of interest. Wherever possible, it was arranged for the party to take at least one meal in each stop-over city, at which civic and business leaders pointed out their progress and charted their future in brief informal talks, and at which the tour party could be introduced collectively to their hosts.

Each member of the party was provided by the railroad, before the tour commenced, with a packet of information, including a review of the Southwest's development and the part played therein by the railroad; a point-by-point description of the railroad and its facilities; the road's latest annual report; and a review of its postwar modernization and expansion program. In addition the road distributed a day-by-day itinerary and schedule of events, so that the working press could map out its writing and copy-filing stints in advance. Lists of members of the party, by name alphabetically, with reference to firm and sleeping car space, and a roster of guests, arranged by cars, were also made available.

Many of the cities visited provided the party with packets of releases, maps, studies and other relevant material well in advance of scheduled stop-overs so that the visitors could "brief" themselves on things to look for and questions to ask.

An Intensive Schedule

The degree to which interest and activity was packed in a relatively short space of time is demonstrated by the following skeleton itinerary of but five points visited on the tour:

SUNDAY, OCTOBER 10

Parsons, Kan. Arrive 8 a.m. Short tour of city. Breakfast at country club, with talk on future of coal by Kenneth Spencer, president of Spencer Chemical Company. Inspection of special industrial and agricultural exhibit set up for the party. Brief look at Katy shops. Train departs 10:30 a.m.

Denison, Tex. Arrive 4 p.m. Look at road's car shops. Boat trip on new Lake Texoma to see power, irrigation and recreational resources. Buffet supper at hotel, followed by short talks by leaders of Denison and neighboring Sherman. Train leaves 12 midnight.

MONDAY, OCTOBER 11

Wichita Falls, Tex. Original oil boomtown. Arrive 8 a.m. Breakfast with Chamber of Commerce, followed by very short talks on "the situation." Bus tour of area, with special demonstration of new Wilson "total model power" drilling rig; stop at ranch where working quarter horses are bred; and inspection of Katy's oil loading facilities at Morfa yard. Leave 12 noon.

Fort Worth. Arrive 4:30 p.m. Bus tour of the area, with inspection of Consolidated Vultee Aircraft plant, where six-motor B-36's are in production. Ranch-style dinner at Fort Worth Boat Club. Evening free. Leave 12 midnight.

TUESDAY, OCTOBER 12

Houston. Arrive 9 a.m., with breakfast "under belt." Bus tour of all sections of the city with stop-over at a revolutionary new hotel. Luncheon with Chamber of Commerce. Boat trip down the Houston Ship Channel to San Jacinto battlefield, thence by bus to Texas City, almost completely rebuilt little more than a year after the explosion. Dinner at San Jacinto inn. Leave 12 midnight.

Other points reached by the tour were Austin, Tex., Waco, Dallas, and San Antonio, and Tulsa, Okla., Muskogee and Oklahoma City.

The tour just completed is the second such pilgrimage operated by the M.-K.-T. In the spring of 1946, the road took a party of 50 for a somewhat similar, though shorter, inspection of its territory, the proved value of which led to a decision to repeat the performance. Reflecting the press attention which the trip attracted, the road, following the first tour, issued a 250-page loose-leaf volume reproducing the mass of newspaper articles and pictures appearing in papers in all portions of the country which were directly inspired by the tour. This volume contained both articles appearing in off-line points and the equally large number of stories in Southwestern papers and periodicals which enhanced the road's standing in its own territory. This second tour has produced even more conspicuous and favorable "copy" in local newspapers along the road, most of it front-page. In all instances the tour party is definitely linked to the railroad as host.

Active Industrial Department

The Katy operates a special Industrial Research & Development Department having the aim of helping new business to locate advantageously in the Southwest. Staffed with trained researchers, the department makes exhaustive studies of fuel and labor costs, of the availability of raw materials and of markets. In 1947 alone the road succeeded in locating a total of 360 new or expanded industries along its lines, representing an estimated new investment of more than \$20 millions and jobs for more than 5,000 persons.

RAILROADS PRESENT CASE FOR FREIGHT-RATE INCREASE

Testimony and statements filed with I.C.C. are designed to show that proposed 13 per cent advance is badly needed to offset increased costs and assure continuance of modernization programs

Railroad executives from all parts of the country will support the carriers' Ex Parte 168 petition for increased freight rates with presentations designed to show the Interstate Commerce Commission that the proposed 13 per cent advance is badly needed to offset increased costs and bring net railway operating income within a striking distance of a fair return on investment, thus assuring continuance of current modernization programs on a soundly-financed basis. The presentations, which put the prospective 1949 return "below 3 per cent" without the proposed increase and at 5.45 per cent with it, also point up the composite view of traffic officers that any loss of business to railroad competitors would be more than offset by revenue from the higher rates.

The statements were filed with the commission and distributed to interested parties on November 9, three weeks in advance of the hearing scheduled for November 30, as required by the special rules of practice adopted by the commission for the proceeding. At the hearing, which will be held in Washington, D. C., before the commission's Division 2, the carriers are expected to press first for favorable action on their motion for authority to make an interim increase of 8 per cent to remain in effect until the commission passes on the basic petition's plea for a permanent advance of 13 per cent. The commission last week assigned the interim-relief motion for hearing along with the basic petition, an action which had the effect of denying the carriers' request for immediate relief.

5 Witnesses; 15 Verified Statements

The railroad case, as submitted this week, will include the testimony of five witnesses and the verified statements of 15 others who will not offer oral testimony at the hearings. The witnesses will be Dr. Julius H. Parmelee, vice-president of the Association of American Railroads and director of its Bureau of Railway Economics; Ralph Budd, president of the Chicago, Burlington & Quincy; W. W. Hale, vice-president of the Southern Pacific; Dr. Jules Backman, economist, of New York University; and C. E. Huntley, secretary-treasurer of the American Short Line Railroad Association.

The verified statements have come from four railroad presidents—R. B. White of the Baltimore & Ohio, Ernest E. Norris of the Southern, C. McD. Davis of the Atlantic Coast Line, and Clark Hungerford of the St. Louis-San Francisco. Also, from Walter S. Franklin, executive vice-president, and Fred Carpi, vice-president (traffic) of the Pennsylvania; H. W. Von

Willer, vice-president, Erie; H. E. Simpson, vice-president, B. & O.; G. T. Carmichael, vice-president, New York, New Haven & Hartford; J. L. Sheppard, assistant vice-president (traffic), Illinois Central; J. P. Patterson, general freight traffic manager, New York Central; C. L. Butler, general freight traffic manager, Missouri Pacific; R. O. Small, general freight traffic manager, Chicago & North Western; H. T. Bradley, valuation engineer, M. P.; and Glenn F. Vivian, manager, Statistical Bureau, Western Lines. Jacob Aronson, vice-president and general counsel of the N.Y.C., is serving as chief counsel for the railroads in the case.

Parmelee Presentation

Dr. Parmelee's statement is based on a 49-page statistical exhibit in which he shows by charts and figures for Class I roads what the trends have been in the industry, and what its present financial situation is. The estimate that the 1949 return would fall below 3 per cent without the proposed increase is his, the specific figure being 2.9 per cent on the basis of an estimated net railway operating income of \$663,400,000. If the proposed increase is allowed, Dr. Parmelee expects the 1949 net railway operating income to be \$1,246,700,000, a return of 5.45 per cent.

The latter contemplates a decline of 2.5 per cent in revenue ton-miles in 1949 as compared with this year. The proposed increase, the B.R.E. director estimates, would raise gross freight revenue about \$1,057,000,000, or 12.4 per cent. Of that total, \$422,328,000 would go to roads in the Eastern district, \$67,110,000 to the Pocahontas region, \$150,322,000 to the Southern region, and \$417,342,000 to the Western district. Dr. Parmelee emphasizes, however, that the \$1,057 million in additional gross freight revenue would be reduced by about 5 per cent, as a result of revisions, corrections, and other adjustments. Thus he put at "about \$1,000 million" the amount that would become a part of the income account.

High Volume, Low Earnings

Meanwhile, he pointed up the railroads' financial problem by noting that the 1946 return on net investment was "less than 3 per cent," while that of 1947 was "less than 3½ per cent"; and the return for 1948 "will be less than 4½ per cent." Figures in the Parmelee exhibit show that rate of return on net investment has been as high as 6 per cent in only one year since 1921—the war year 1942, when it reached 6.3 per cent.

The B.R.E. director notes that the "low earnings"

of the years since the war have come in a period of "high traffic volume," and at a time when the railroads "are making, and should continue to make, large expenditures for modernization and rehabilitation of their physical properties." He adds that "the substantial reserves built up during the war are being gradually exhausted, although the improvement program is far from complete." In that connection, Dr. Parmelee calls attention to figures in his exhibit which show that the net working capital of the Class I roads amounted to \$789 million on August 31, a drop of \$870 million below the \$1,659 million shown as of the end of 1945. "Sharp advances in equipment and other prices have greatly reduced the purchasing power of these reserves, as well as the funds available from current earnings," he also says.

The primary reason for the railroads' "low earnings" is found by the A.A.R. vice-president in the "wide disparity" between the prices they pay for labor and materials and the prices received by them for transportation services. In this connection, he refers to the wage-increase movement which is now on its "third round," and points out that the prices paid for fuel, materials and supplies have increased more than 120 per cent since 1939, while prices that railroads charge for their services have advanced "little more than 40 per cent."

"The result of these trends," Dr. Parmelee continues, "is reflected in a restatement of the estimated operations in 1949 on the basis of current rates, fares and charges, and current wage and price costs, by substituting the rates and costs effective during the year 1939. Using that year's operations as a yardstick, operating revenues show an increase of \$2,794 million due to increased rates and fares since 1939, whereas operating costs show an increase of \$4,000 million due to increases since 1939 in prices, payroll taxes, certain other costs, and wage rates, including the anticipated increase of 10 cents per hour to all employees. The gap of \$1,206 million between increased costs and increased revenues would not be wholly bridged by the proposed rate increase in this proceeding."

Performance Showing "Excellent"

In other parts of his statement, the B.R.E. director presents figures on the capital improvement program under way in the industry, appraises railroad dividend policies as "conservative," and discusses operating trends and performance figures. The latter discussion includes the following general comment: "For some of the increased performance records during the war, greater volume of traffic was of course responsible. The showing since the war has been an excellent one, generally speaking, when traffic and operating conditions are taken into account."

Comparing the rate of return in the railroad industry with that in other industries, Dr. Parmelee has figures which show that manufacturing and mining companies and public utilities in 1947 "experienced a much higher earning level than the railroads." He also has figures showing the trend of farm prices and wholesale prices of manufactured goods, which "have risen to a much greater degree than railroad rates." The railroad industry's "cost of living," he says in closing, "has increased 96.7 per cent since 1939,"

while its rates, fares, and charges have increased "no more than 41.6 per cent."

Dr. Backman's presentation is also based on a comprehensive statistical survey which leads him to the general conclusion that the railroads "have not participated adequately in the present boom, as compared with other industries." Railroad profits, the economist also says, "have fallen short of the totals achieved during the prosperity of the 'Twenties when the volume of traffic was substantially lower," while "the contrast between railroad profits and those in other industries has been marked during the post-war years."

Railroads Out of Prosperity Parade

Among the Backman figures are those which show that corporate profits in the first half of this year were up to an average annual rate of \$18.6 billion, 121 per cent higher than the comparable 1929 figure of \$8.4 billion. "In contrast to this record," as Dr. Backman puts it, "the railroads had net railway operating income of \$1,252 million in 1929 and an estimated \$1,012 million in 1948. While the profit of all corporations was more than twice as high in 1948, net railway operating income was 19 per cent lower in 1948 than in 1929."

The economist proceeds to present a like picture by using other comparisons, such as the proportion of the revenue or sales dollar retained as profits, and the return on "net worth." He comes then to his consideration of "railroad profit margins," i.e., "the margin which net railway operating income represents of total operating revenue." That situation is one "which must be viewed with serious concern," in Dr. Backman's opinion. He shows the 1947 margin before income taxes at 12.4 per cent and estimates that the 1948 figure will be 14.9 per cent. These compare with a 1929 margin of 21.3 per cent, and a wartime peak of 30 per cent in 1942.

"This low margin or high break even point has terms of great significance in terms of the future of this industry," Dr. Backman continues. "Declines in total operating revenues, when they take place, are bound to be reflected in much sharper decreases in net railway operating income before taxes, as has been true in the past. This means that relatively small decreases in volume would reduce substantially or could wipe out the present inadequate profits. The inability of the railroad industry to obtain a normal margin during this period, contains the seeds for serious difficulties in the future."

Prices Will Remain High

Dr. Backman's study of price trends leads him to conclude that, in the years immediately ahead, the railroads will be faced with higher costs for plant and equipment "than at any time in the last 50 years." He goes on to say that depreciation reserves set up on the basis of original cost "will prove to be inadequate by a significant margin to replace retired plant and equipment," and that the additional funds "will have to be obtained from undistributed profits or by raising new capital." Another of Dr. Backman's comments on present depreciation procedures is his assertion that they result in "an overstatement of the *real* profit picture of the railroads."

As to the railroads' call for earnings under which their average annual return will be at least 6 per cent, the economist will tell the commission that "it is important to keep in mind that a 6 per cent return today has the real purchasing power of about 3.5 per cent before the war." He will go on to say, however, that he makes that point only to emphasize "how conservative" a return of 6 per cent would be; he recognizes that there is "little possibility" of any undertaking to make allowances for declining value of the dollar. Other data reviewed by Dr. Backman are designed to show that prosperous conditions prevail generally in industry and agriculture, the implication being that the proposed freight-rate increase could be paid by shippers without hardship.

Meeting Transport Policy's Requirements

President Budd of the Burlington gets his statement under way with a quotation from the Interstate Commerce Act's declaration of national transportation policy and an expression of his opinion that the railroads "have done their part in meeting the requirements" of that policy. Thus he wants it "distinctly understood" that what he says about the "deficiencies in railroad plant and service" is not intended to mean that there is a "failure of railway transportation, or that the railroads have approached a condition of breaking down." Mr. Budd's concern, as he puts it, is that "nothing shall happen which will prevent the railroads from keeping up with the progress of the country, with other types of commercial activities, and with other forms of transportation."

The only feasible way to do this, he says, is "gradually but continuously," for "it is improvident, if not impossible, to let the plant deteriorate for some years and then try quickly to place it in condition to meet some grave emergency." That the railroad policy has been one of gradual and continuous improvement, Mr. Budd indicates by references to developments which have occurred with respect to all types of railroad facilities. He goes on to stress the current requirements for capital to continue that policy so that service may be "up to date" and advantage may be taken of technological advances which will increase the efficiency and capacity of the railroads.

"Their first and vital need of course is to replace their old, worn out cars and locomotives with units of the latest types and to add some new units," the Burlington president continues. "Equally necessary, but not so obvious, is the replacing of more old track rail than has been done, in order to catch up on the wear and tear due to the heavy traffic since 1941. A more expensive program of shops and shop tools should also be undertaken. Many railroad shops are not as well equipped or as well arranged as they should be and many railroad shop tools are obsolescent."

Service Must Be Paid For

Disclaiming any "thought or wish" that the railroads "should have the cost of improving their plants paid for by the government or that they be subsidized as is being done for some other types of transport," Mr. Budd insists that "there is nevertheless a price which

the public has to pay in order that the railways shall be able to keep up with the progress which their competitors are making largely at public expense . . . Under our plan of providing public transportation by rail, the rates and fares must sustain the carriers and whatever causes loss of traffic or prevents the most efficient operation tends to make for higher rates and charges, and deterioration of service."

This brings Mr. Budd to his conclusion that "our system" makes it "essential that the railroads be afforded an opportunity to earn a fair return, if the civil and military needs of the country are to be cared for." He notes how the railroads have responded to I.C.C. urgings that they reduce their debt, and suggests that it would now be "a backward step, contrary to the public interest, to force the railroads deeper into debt in order to put their physical plant in proper condition."

He also warns that there should not be too much complacency in viewing equipment obligations as a solution of the railroad credit problem, even though they bear relatively low rates of interest and "have served a useful purpose." On that score, the Burlington president goes on to say that a railroad buying \$1,000,000 worth of equipment each year, paying 10 per cent down and 10 per cent of the balance each year thereafter until paid, would be on a cash-payment basis by the tenth year, i.e., "it is paying in cash on its various equipment obligations as much as if it were buying equipment each year on a cash basis, and, in addition, is saddled with interest obligations."

Heavy Cost of Staying in Business

Mr. Budd also refers to a "startling fact" which "seems not to have been generally appreciated" — that "under present conditions it requires the use annually of a substantial amount of new capital simply to stay in business." He was there referring, like Dr. Backman, to the inadequacy of depreciation reserves based on original costs when property replacements must be made on the basis of present prices.

Vice-President Hale of the S. P. describes his testimony as an undertaking to explain the rate-increase petition and to outline considerations which lead to its filing. In the latter connection, he cites figures from the Parmelee exhibit to point up the situation as to revenue needs which confronted traffic officers. The problem of those officers, he says, "was to arrive at the most practical way of obtaining required additional revenue with minimum disturbance to shippers and receivers of freight, and the public in general." They concluded that the proposal set out in the petition was the "only practical method" of approaching that objective.

The traffic officers, as Mr. Hale puts it, gave "very serious consideration" to the prospective loss of traffic to competing carriers; and it is their "considered judgment" that "while there may be a diversion of traffic, it will not be sufficient to deprive petitioners of a substantial increase in over-all revenue." In this connection Mr. Hale notes that the impact of higher costs is also felt by competing transport agencies, and he recalls that substantial additional revenue has resulted from the general rate increases of recent years. In another part of his statement, he asserts that even

with the proposed increases, the cost of rail transportation "will be one of the smallest elements of cost of commodities to consumers."

Short Lines Need Increase

The testimony of Secretary-Treasurer Huntley of the Short Line Association is a brief explanation of an exhibit showing the financial condition of the association's member roads. The exhibit's showing, as Mr. Huntley points it up, is that "the short line railroads' cost of operation has increased to such an extent since 1939 that their present freight rates and charges are not producing a net railway operating income adequate to maintain them in a financial condition to enable them to continue to provide the public with adequate and efficient transportation service."

Executives who filed the verified statements confine their comment largely to conditions on their own roads, noting however that the situations they describe are more or less typical of other roads in the same territories. President White of the B. & O. said that his road needed the increase to bring its 1949 net railway operating income up to about \$35 million, a return of 5.64 per cent, the amount it needs to "enable us to go ahead with required capital improvements" and to "pay the owners of the property some return on their investment."

President Norris of the Southern points out that his road will have a return of only 4 per cent in 1948, and reminds the commission that it has "within the last 60 days recognized an 8 per cent return as fair on the investment in a pipe line" (see *Railway Age* of October 2, page 62). "A six per cent return," he adds, "is essential if a large railroad is to function properly in maintaining its physical requirements, and what is equally important, in maintaining its credit."

Among uncertainties in the railroad picture, Mr. Norris lists the Supreme Court's decision upholding the Federal Trade Commission order outlawing the cement industry's basing-point system of prices. That, he says, "leaves us in a quandary over what effect it will have upon the flow of traffic in the future." He also refers to "those who would do away with the heavier loading requirements of O.D.T. and this commission," a relaxation which would "have the effect of substantially cutting the car supply." Of the petition generally, he says that the increases proposed "are not enough to affect prices to the final consumer in any substantial way," since "the total freight bill is but a small part of the value of the commodities transported."

I.C.C. Orders Require Spending

President Davis of the A.C.L. says that the proposed increase would bring that road's 1949 return up to only about 2.7 per cent. He also stresses his view that the railroads need the interim relief proposed. The failure to obtain such relief promptly in previous cases, he adds, "has been a serious drain upon cash or treasury resources of the railroads." Among other costs facing his road, Mr. Davis lists an estimated \$21,000,000 for compliance with I.C.C. orders requiring it to make new signaling installations, and the general commission order requiring the installation of auto-

matic block signals and train-control on high-speed lines.

"Such funds," Mr. Davis tells the commission, "can only be provided by increased earnings. Unless increased earnings are obtained, it obviously will be necessary to seek relief from the provisions of the signal orders, if we cannot find the means for paying for the installations."

President Hungerford of the Frisco expresses his conviction that the proposed increases "are absolutely necessary" for roads in the Southwestern region. He also makes an "earnest plea" for the granting of an interim increase "sufficient to meet immediate needs resulting from the wage increases and increases in prices of materials and supplies since the date used by the commission in determining the increases allowed in Ex Parte 166."

Noting that the Frisco's capitalization was "drastically reduced" by reorganization in 1947, Mr. Hungerford points out that its "first mortgage bonds are selling at 83 cents on the dollar, the income bonds at about 58 cents on the dollar, and the preferred stock, at about 41 cents on the dollar."

Earning Power Insufficient

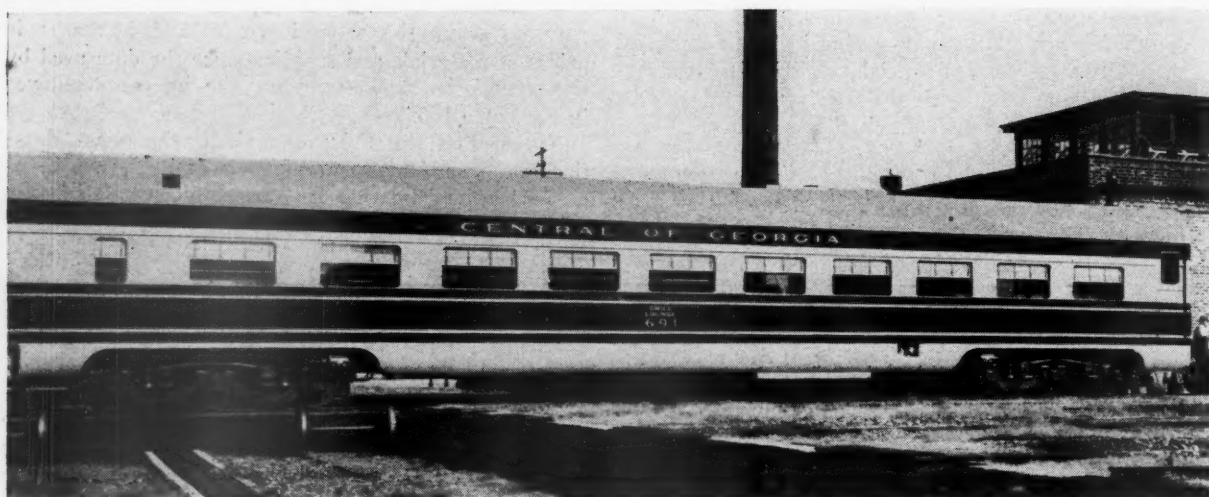
Vice-President Franklin of the P.R.R. presents the situation of that road and other figures which make it "clearly evident" to him that the railroads do not now have sufficient earning power to continue their operations without the accumulation of further deferred maintenance. "The real problem that worries railroad management today," Mr. Franklin also says, "is that with the enormous volume that is now moving, there should be insufficient earnings to make up deferred maintenance and to modernize the properties . . . To accomplish this requires enormous expenditures far beyond what are now being made by most railroads. These expenditures cannot be justified under the present earnings, and proper financial arrangements cannot be made until these earnings are substantially improved and the railroads have demonstrated that this improvement will continue over a period of time."

Vice-President Carpi of the P.R.R. presents additional data and estimates with respect to that road and also a comprehensive statement in support of the proposed increases in rates on coal, coke and iron ore. Except as to the latter, the other traffic executives make presentations similar to that of Mr. Carpi. Like him, they consider the prospective loss of business, and find that the diversion will be relatively small while the revenue gain from the proposed increase will be of substantial benefit. Several of the traffic executives said that some traffic now moving by truck had been lost to the railroads only because of the shortage of freight cars.

Valuation Engineer Bradley of the M.P. offers critical comment on the valuation statement prepared by the commission's Bureau of Valuation by direction of Division 2 "for possible use" in the case (see *Railway Age* of November 6, page 62). Manager Vivian of the Western Lines' Statistical Bureau makes a special presentation in support of the proposed increase as it applies to charges for protective (temperature-control) services on perishable freight.

CENTRAL OF GEORGIA GRILL CAR

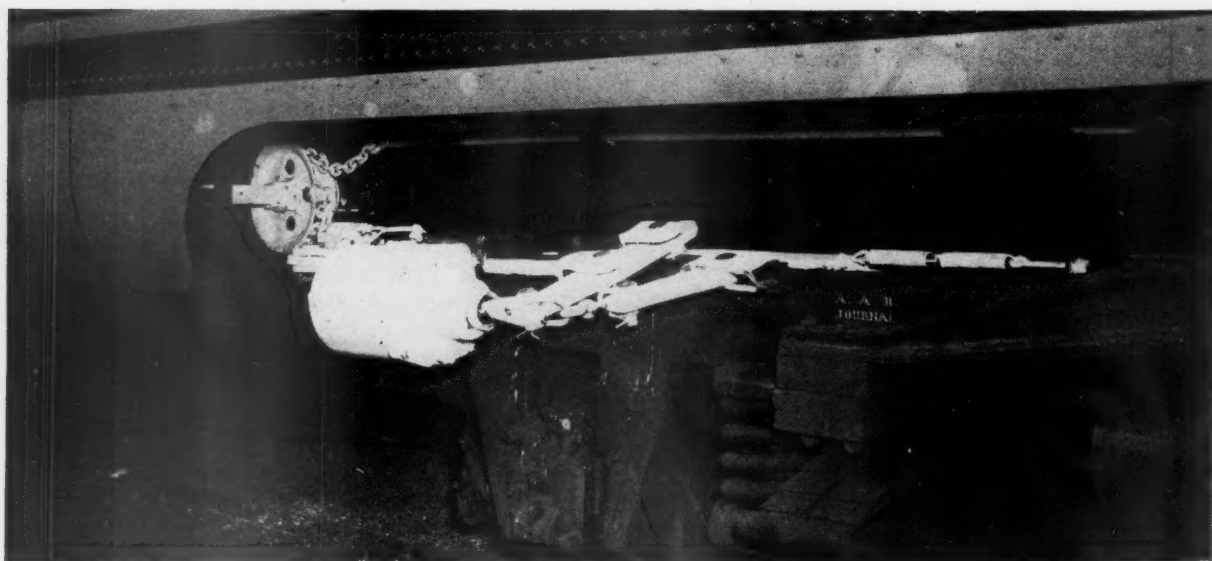
*Modernized Pullman has dining,
lounge and counter sections*



In September, at a cost of approximately \$70,000, the Central of Georgia completed work on the reconstruction of a Pullman car into a grill-lounge car at its Savannah, Ga., coach shops. The rebuilt car has three sections: a lounge section and a dining section,

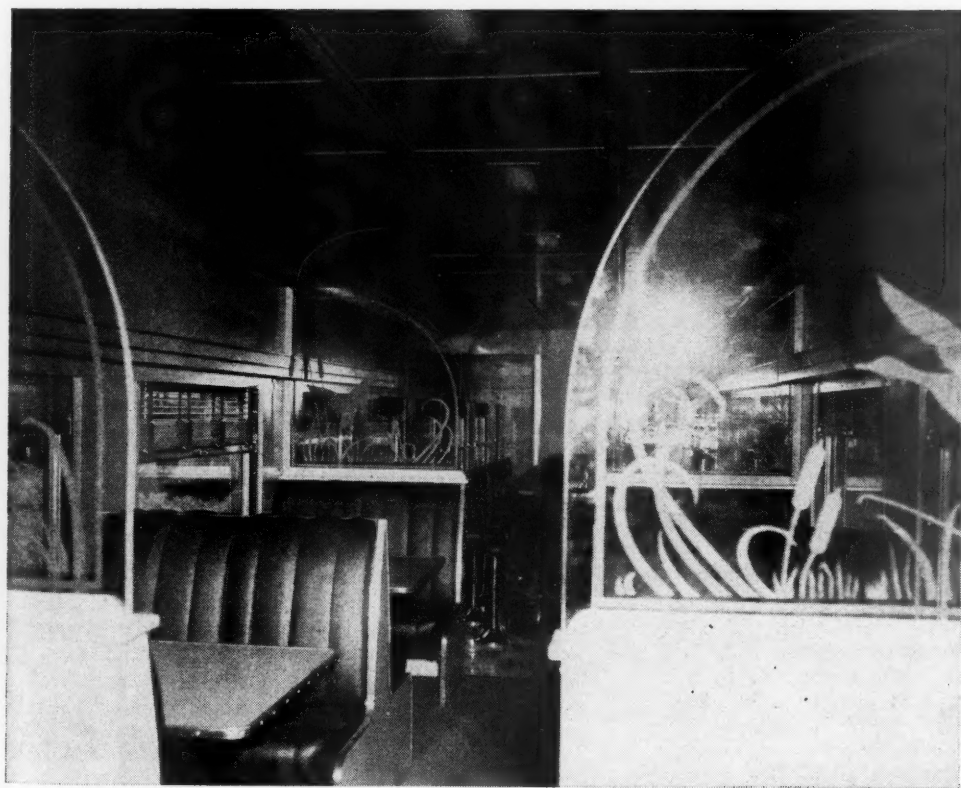
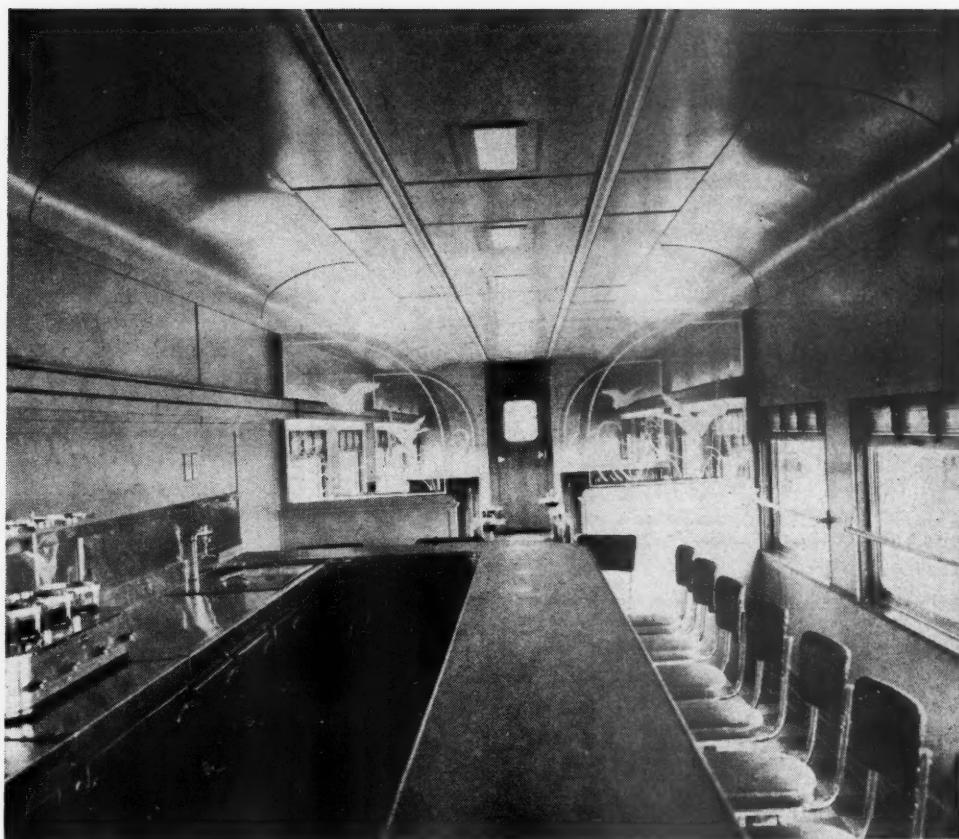
each with a seating capacity of 16, and a counter section seating 12.

The dining section, which has four tables with benches, is separated from the counter and lounge sections by built-up partitions, the upper portions of



The six-wheel trucks are equipped with clasp brakes

The counter section has a stainless steel finish and back bar of the same material



Fluorescent - lighted, etched glass partitions mark the separation between the counter and the lounge sections

Partial List of Materials and Equipment on Central of Georgia Grill Cars

Air brake equipment, HSC modified, including truck-mounted cylinders and slack adjusters	New York Air Brake Co., New York
Hand brake	W. H. Miner, Inc., Chicago
Truck clasp brakes	American Steel Foundries, Chicago
Roller bearings	Hyatt Bearing Div., General Motors Corp., Harrison, N. J.
Folding trap doors	O. M. Edwards Co., Syracuse, N. Y.
Tight lock couplers	National Malleable & Steel Castings Co., Cleveland, Ohio
Coupler yokes	Symington Gould Corp., Rochester, N. Y.
Draft gears	Waugh Equipment Co., New York
Air-conditioning equip-ment—Electro mechanical	Safety Car Heating & Lighting Co., New York
Air-conditioning controls	Vapor Heating Corp., Chicago
Heating and heating controls	Vapor Heating Corp., Chicago
Windows—double glazed	Adams & Westlake Co., Elkhart, Ind.
Da Lite control blinds	Ajax-Consolidated Co., Chicago
Micarta window sills	Westinghouse Electric Corp., Trafford, Pa.
Lighting fixtures	Safety Car Heating & Lighting Co., New York
Etched glass for partitions	Safetee Glass Co., Philadelphia, Pa.
Lounge furniture	General Fireproofing Co., Youngstown, Ohio
Smoking and cocktail stands	Marshall Field & Co., Chicago
Counter stools	Duro Chrome Corp., St. Louis, Mo.
Back bar, portion of	Stearnes Co., Chicago
Silex coffee maker	Silex Co., Hartford, Conn.
Gas range and broiler	Detroit Michigan Stove Co., Detroit, Mich.
Thermaduke	Duke Mfg. Co., St. Louis, Mo.
Other kitchen equipment	Stearnes Co., Chicago

which contain tinted Safetee glass with designs etched in the glass. These are edge-lighted by concealed fluorescent lamps. The table tops are covered with Formica and the dining seats are covered with imitation leather.

The lounge section has four double settees and eight single chairs. These have aluminum frames with upholstery in three colors that harmonize with the interior finish of the car.

The counter section contains storage lockers and drawers. The counter is covered with stainless steel on the inside and linoleum on the front and top. There is a footrest of stainless steel along the bottom of the counter. Back of the counter is a refrigerated back

bar with two ice wells for cracked ice, three wells for fruit juices, another for ice cream, and several lockers for bottled drinks, etc. In addition, there are two dry storage lockers. A Silex coffee maker is located on the back bar. All of the back bar is of stainless-steel construction.

The kitchen is lined with stainless steel and all of the lockers are of that material. The kitchen contains a refrigerator, stove, Thermaduke (steam table), sink, hot-water heater and storage lockers. Propane gas is used for fuel. The kitchen has an outside door in the side of the car for the loading of supplies.

The color scheme of the car interior varies from pale banana on the ceiling between the air distributors to a tempered gray on the side walls. The floor covering in the counter section is rubber tile in 9-in. squares while the dining and lounge sections have carpet. The interior car finish is aluminum with stainless steel snap-on moldings, all of which is painted.

The exterior color scheme of the car is the Central of Georgia's standard blue and gray. In rebuilding the car an oval-type roof was used and sideskirts were added below the side with cut-outs alongside the trucks.

The windows are the Adams & Westlake wide type, double glazed, with DaLite control blinds and Micarta sills. Except for the kitchen, fluorescent lighting is used throughout the car. The ceiling lights are located for direct lighting and the indirect side-wall lighting is located in troughs. These troughs are used in the lounge and dining sections and for the full length back of the bar. The kitchen lighting is incandescent.

The car is cooled by the Safety Car Heating & Lighting Co.'s electro-mechanical air-conditioning system, the cooled air being distributed by two distributors mounted in the ceiling. Vapor air-conditioning controls are used. The heating system employs the Vapor Car Heating Corporation's fin-type radiators at the floor level as well as radiation in the overhead air-conditioning unit.

The trucks are the General Steel Castings Corporation's six-wheel drop equalizer type having elliptic and coil springs and A.S.F. clasp brakes with truck-mounted brake cylinders.

A PATTERN FOR COOPERATION

"I am not yet satisfied that we have emerged from the most acute stage so far as service is concerned. It is up to the railroad industry to find ways and means to meet reasonable service demands.

"Service is not a matter for any one carrier. To the shipping and receiving public a mistake or lack of cooperation by one railroad injures the whole railroad industry. The plant waiting for a delayed car of freight is less concerned with knowing what railroad is at fault than knowing how soon the car can be delivered. My interpretation of service includes coordination with all our connections—to arrange these connections, and, in the absence of undue delay, to insure connections by allowing reasonable give and take at junction points. This is particularly true as between our New England carriers and also between them and their immediate connections—north, south and west. Running away from a connec-

tion because of a few minutes delay and thereby inconveniencing shippers by 12 or 24 hours does not fit into any pattern for cooperation.

"It is important for us to take resourceful advantage of conditions of change; and it is inevitable that we shall make changes. . . . We shall endeavor to consult with shippers to explain our reasoning and to avoid misunderstanding. Reasonable 'whats and whys,' we believe, will engender reasonable understanding. Advance discussion and negotiation is part of a pattern of cooperation, and it certainly is both desirable and necessary if we find ourselves forced to take some service away or to make changes which affect your business."

—Lawrence F. Whittemore, president of the New York, New Haven & Hartford, in an address to the New England Shippers Advisory Board.



Grant Stauffer

NEW GREAT WESTERN HEAD LIKES OWNER-MANAGEMENT

**Grant Stauffer, coal producer and capitalist,
represents group owning more than half
road's capital stock; is "playing for keeps"**

Grant Stauffer—one of the country's leading coal producers and a member of a group of investors who are interested in the Kansas City Southern—was elected president of the 1,500-mi. Chicago Great Western at a meeting of its board of directors on October 19, and took office the following morning at the road's Chicago headquarters. At the same time, to meet the requirements of the Interstate Commerce Act, he resigned his posts as a director and chairman of the executive committee of the K.C.S., effective immediately. As head of the Great Western, Mr. Stauffer succeeds Harold W. Burtness, whose resignation as president was made effective September 1, and as director and chairman of the executive committee a short time thereafter. A review of Mr. Burtness' career and a short description of the property appeared in *Railway Age* of August 14, page 69.

Advocate of Owner-Management

Mr. Stauffer has for many years operated his large coal mining interests on the premise that management which has ownership in the property will work harder than otherwise to produce profits and expand the earning power and strength of its equity. That this "socialism in reverse" has worked is evident in the rapid expansion and unusual earnings of the coal companies in which he is interested.

The Great Western's new president believes that active management of railroads by their owners is preferable to absentee ownership. The problem of obtaining active interest in operations by owners in the case of widely held and large concerns has as yet no solution, he admits, but he asserts there is much that can be done in promoting it in smaller properties like the C.G.W.

"Playing for Keeps"

Mr. Stauffer represents a group of investors who, during the past two years, have purchased a substantial number of shares of common and preferred stock of the road (both are voting stocks). They have invested their money in the company because they believe it will be a long-term profitable venture for them. They do not consider it a speculation, Mr. Stauffer asserts, and "are playing for keeps."

To increase the profitability of the line, this new owner-management has already initiated a program of speedy and intensive modernization, which includes an extraordinary program of rail and ballast renewal, purchase of new freight cars and acquisition of more modern motive power. The new president, from his experience with the K.C.S., has found that "you can't make money with a poor railroad."

Standing back of this program of expenditures is a low level of fixed charges, relatively small debt and a substantial increase in current gross and net revenues. The C.G.W. had only \$12.8 million of funded debt at the end of January, 1948, of which \$7.8 million was subject to fixed charges, the remainder being contingent interest liabilities. On October 19, the company paid off the last \$2 million of its debt to the Reconstruction Finance Corporation. Gross earnings in the first eight months of 1948 totaled \$22,810,894, compared with \$19,675,646 in the corresponding period of 1947, and net railway operating income attained \$2,393,620, compared with \$1,194,509. In the same period of 1948 fixed charges were earned 7.05 times, compared with 2.09 times in 1947 (before income taxes).

The C.G.W.'s new president has been active in the coal business for 34 years. During most of that time he has dealt with railroads as purchasers of fuel, though at no time have carriers been the major customers of any of his properties. It is significant that the Sinclair Coal Company, which he heads, and which is the parent company of almost all the properties in which he is interested, is one of the three major coal companies associated with a number of coal-carrying railroads in backing Bituminous Coal Research, Inc., for developing a more satisfactory coal-burning locomotive powered by gas turbine, steam turbine or other prime mover. Mr. Stauffer is hopeful that these researches will produce motive power of the future which will permit the railroad and the coal industry to move along together, for their mutual interest, as they have for so long in the past.

At the same time, Mr. Stauffer is not unaware of the great savings and operating improvements occurring from the use of Diesel-electric power at the present time. The K.C.S. is one of the most Diesel-conscious roads in the country, as pointed out in *Railway Age* of April 3, 1948, page 41, and is well on its way toward complete elimination of the reciprocating steam locomotive, despite the importance of coal in its traffic pattern. It is his opinion that the railroads must use

that type of power which does the best job. In this connection he is highly critical of the custom of some roads of buying inferior and varying qualities and sizes of coal for locomotive fuel—either to “please” shippers or to save pennies—and believes it is good for neither the railroads nor coal industry to accept or sell fuel supplies which he characterizes as “containing hair, feathers, guts and all.”

Will Build up Road

Mr. Stauffer's statement to the press, issued shortly after his election to office, read in part:

“I have accepted the presidency of the Chicago Great Western Railway Company with full knowledge of the many problems of the industry and particularly those of this property. There is much to be done in building up its physical condition. A fair start has been made, but heavy expenditures will be required over the next two years on track, bridge and building improvements, new and expanded yard facilities, and in the acquisition of more modern power and rolling equipment. We shall meet those problems head-on and push the things designed to improve the service to our patrons.

“We shall be active in developing the territory in-

dustrially. We shall make ourselves an integral and helpful instrument in upbuilding the area. We believe the property can be built into one of great importance. It serves the best agricultural section of our country. It reaches the best towns and industries, and should become more important as a bridge line east, west, north, and south. It shall become a property in which its officers, employees, investors and patrons can take pride. . . . The substantial stock interests which I represent intend to make the Chicago Great Western Company a human and efficient enterprise. It may take time, but we are certain of the ultimate results.”

Mr. Stauffer, a native of Hope, Kan., was born on December 1, 1888. He was graduated from high school in that city in 1907, after which he continued his studies in college at Emporia, Kan. Since 1912, he has served successively as coal salesman, coal jobber and operator, and in the producing and marketing of coal. In addition to his post as president of the Sinclair Coal Company, Mr. Stauffer is a director of Stauffer Publications, the Business Men's Assurance Company of Kansas City, Commerce Trust Company of Kansas City, and American Mining Congress, and a former president of the Kansas City Chamber of Commerce. He is also a director and a member of the executive board of the National Coal Association.

PROPOSING A "LOBBY" IN THE PUBLIC INTEREST

Inherent in the unchecked expansion of governmental services is the hazard of state socialism. As government continues to invade new fields, the strength of private endeavor is weakened.

There is clear evidence that American government in operation tends more and more in this direction. The trend is definitely collectivistic, and, carried to its extreme, spells some sort of totalitarian regime. This tendency is not a conscious or deliberated expression and is certainly not a desired objective insofar as the interests of the citizen group as a whole are concerned.

This collectivistic trend stems from the roots of special group interests whose voices are louder than those of the general interests that government theoretically serves. There is no spokesman for the general interests.

Who appears before the lawmaking bodies in these days?

For the most part, there appear only those who zealously advocate special projects and appropriations and those who as vigorously oppose these things.

It is not a question of getting better legislative representatives. The best of them are thwarted by the Frankenstein of the organized special interest groups. A change of administration would not of itself produce the remedy.

What is needed is a change in civic philosophy and citizen responsibility. This can be achieved only by an intensive program of education for the citizens of the nation. Our people must be made conscious of the hazard that attends their apathy and indifference to governmental affairs. Leadership of a concrete and positive nature is needed. Such leadership must be respected and understood.

A group that is capable of leading us out of the morass are the leaders of the private enterprise of the nation. But if businessmen accept the responsibility they must be prepared to forego the employment of practices that in the past have contributed to the conditions now needing

correction. They must set their own houses in order and give proof that their intentions are unselfish.

Within the field of business there must be developed a common acceptance of the true principles of freedom of enterprise and competition. This means specifically that business should set the example of discouraging all legislation aimed to benefit a few at the expense of the majority. Private enterprise in its various forms must give evidence of its competency to render, and its willingness to accept responsibility for, certain services in the interest of the general welfare of the citizens of a democracy, in default of which governmental assumption may be the only alternative. To stem the tide of increasing governmental services, the combined interests of private enterprise must present a united front with a constructive program designed to appeal to the intelligence of citizens. Business interests must succeed in erasing from the public mind the fallacious concept that the interests of business management are in basic conflict with the interests of workers. This they must demonstrate in truth as well as in spirit. All business must agree on a common program of education that will appeal to the public.

In brief, business leadership has before it the opportunity to become the most constructive as well as the most powerful lobby in the nation. This lobby would be the voice of the people. Owing allegiance only to the cause of good government, soundly financed, and restrained within democratic bounds, it would carry to legislative halls only the viewpoint of the intelligent and informed citizen. Consecrated to the tenets of ethical business practices and inspired with the zeal to preserve American democracy for the people as a whole and not for a conglomerate of special interest groups, it would serve itself well by serving.

— William H. Stauffer, director of research of the Virginia State Chamber of Commerce, in “The Commonwealth.”

GENERAL NEWS

Wood Preservation Nearly Makes Record

All classes of materials register increases in 1947

Under the impetus of a generally increasing demand for treated wood for construction and repairs—a major part of it on the railroads—356,587,809 cu. ft. of wood were given preservative treatment in 1947, according to an annual report, just released, compiled by Henry B. Steer, Forest Service, United States Department of Agriculture, in cooperation with the American Wood Preservers' Association. This was about 16 per cent greater than the amount treated in 1946 and was exceeded only once before—in 1929, when a total of 362,009,027 cu. ft. were processed.

Pole Treatment Increases

In 1946 poles made the most outstanding advance of any class of material treated. In 1947 they continued that steady rise, started in 1943, to another all-time high of 8,096,613 poles, or 142,500,389 cu. ft. This volume almost equals the 143,827,356 cu. ft. of crossties given preservative treatment. This precipitous rise in the quantity of poles treated, in which the volume has almost tripled since 1945, threatens the first-place ranking which crossties have held since records of wood preservation were started in 1909.

Quantities of Various Classes of Timber Products Treated in 1947

	Cu Ft.	% Change over 1946
Crossties	143,827,356	+5
Switch ties	11,596,236	+54
Piles	11,194,867	+11
Poles	142,500,389	+25
Wood blocks	4,029,601	+4
Construction timbers	8,351,937	+10
Crossarms	3,742,655	+216
Miscellaneous	31,344,768	+21
Total	356,587,809	+16

Of the total number of poles reported, 4,955,750 were treated with creosote; 536,517 with creosote-petroleum-pentachlorophenol solution; 871,932 with creosote-petroleum solution; 845,208 with creosote-petroleum copper-naphthenate solution; 829,293 with petroleum-pentachlorophenol solution; and 57,913 with other preservatives.

More crossarms were treated in 1947 than in any previous single year—6,038,489. That number was about three times as large as was reported in 1946, reflecting the largest increase over

1946 of any category of material given preservative treatment.

Crossties—47,942,452 of them—continued to be the largest class of material given preservative treatment. Approximately 55 per cent were treated with creosote or creosote-coal-tar solution, and about 43 per cent with creosote-petroleum solution. These figures represent a decrease of five per cent in the number treated with creosote and an increase of seven per cent in the number treated with creosote-petroleum mixtures. Again, as last year, oak and southern pine ties predominated. Oak ties retained approximately the same percentage of the total as in 1946, but southern pine ties dropped from 28 per cent to 18 in retaining second place. The number of gum ties dropped slightly, while Douglas fir ties increased in like proportion to reverse their relative positions of third and fourth. The number of pine ties treated about doubled, and thereby rose in standing from tenth to fifth place.

Fire-Retardant Treatments

The quantity of wood given fire-retardant treatment in 1947 was 13 per

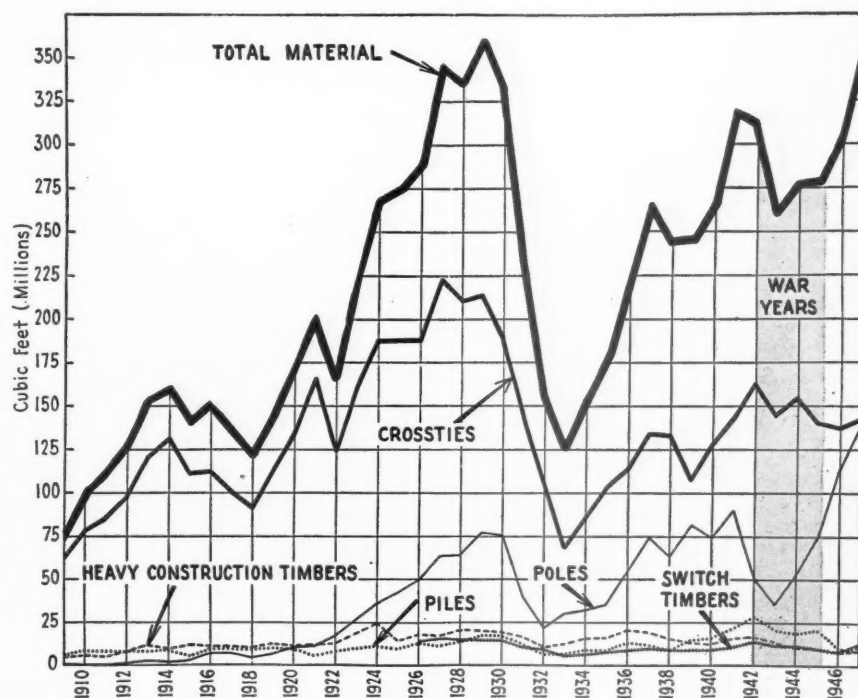
cent more than in 1946. This increase arrested a steady decline, begun in 1943. The principal chemicals used in this treatment were chlorinated zinc chloride, Protexol, and Minalith.

Consumption of Preservatives

The shortage of creosote which has plagued the wood-preserving industry for the last several years continued into the early part of 1947. However, it resolved itself in time for the total amount of creosote used to reach 215,815,877 gal., or 25 per cent above that used in 1946. There was not only a small increase in the amount of domestic distillate coal-tar creosote used, but a very large increase in the amount of imported distillate coal-tar creosote received and consumed. In fact, the amount of imported creosote used was more than 16 times the amount used in 1946.

During 1947 the wood-preserving plants reported a consumption of 82,948,095 gal. of creosote-petroleum solution, or an increase of 10,602,972 gal. over the amount reported for 1946. This total includes 434,288 gal. of creosote coal-tar solution. According to the Forest Service report, "creosote-pet-

This chart shows the trend of wood preservation from 1909 to date, with one of the curves showing all material treated and the others indicating trends for the different categories



roleum solutions in varying proportions are used mainly in the treatment of crossties, switch ties, and poles; the petroleum, which is not toxic, acting as a diluent for the creosote."

Although it was reported in 1946 that the use of pentachlorophenol and copper-naphthenate were used for the first time only because of the shortage of creosote, the use of these salts continued to increase during 1947 in spite of the increased availability of creosote. While all other preservatives, including oils and salts, were used in larger amounts during 1947, the amount of zinc chloride, Wolman salts, and Celcure decreased slightly.

There were 29 more treating plants in operation in 1947 than in 1946, according to the report. Of the total number of active plants, 222 treated wood for sale or by contract; 20 were owned or operated by railroads for the treatment of railroad material; and 23 were plants owned or operated by public utilities, mining companies and others.

Senate Group Starts Basing Point Probe

Launches public hearings into effect of supreme court ruling

The Senate Trade Policies Committee on November 9 began public hearings in connection with its investigation of the prospective impact of the Supreme Court's April 26 decision upholding the Federal Trade Commission's "cease and desist" order against the cement industry's basing point system of pricing. The hearings will continue until December 3, and the present schedule lists representatives of the "railroad industries" among those who are expected to appear during the week beginning November 28.

Capehart Outlines Objectives

The committee, headed by Senator Capehart, Republican of Indiana, is a subcommittee of the Senate committee on interstate and foreign commerce. Interested parties have been uncertain as to the future course of its investigation in view of the national elections in which the Republican party lost control of both branches of Congress. In that connection, Senator Capehart read at the hearing's opening session a telegram he had received from Senator Johnson, Democrat of Colorado, who is in line for the interstate commerce committee chairmanship in the next Congress. Senator Johnson advised Senator Capehart that he expected to assume also the chairmanship of the subcommittee; but that the Indianian should meanwhile conduct the hearings as originally planned.

Proceeding on that basis, Senator

Capehart said in his opening statement that he construes the obligation of the subcommittee "at this time" to be one of conducting a study "to determine whether sellers should lawfully be permitted to adopt uniform delivered prices, uniform zone prices, and pricing practices involving the absorption of freight to meet the lower price of a competitor located closer to the consumer, whenever such practices are individually and separately employed in the absence of a conspiracy." Thus, the subcommittee, as Senator Capehart put it, "will not waste time on the propriety of conspired prices." Such prices, he added, "are clearly wrong," and "the activities of this committee and the report which it will file will not, in my judgment, do anything to weaken the enforcement of our conspiracy laws or in a way aid unscrupulous business men to conspire to fix prices."

Senator Capehart also inserted into the record a resolution adopted by the subcommittee on July 30 to set out its plan of procedure. The resolution stipulated that matters to be investigated would include the effect of the court-approved F. T. C. policies upon "the freight rate structure of the country as promulgated and administered by the Interstate Commerce Commission."

First Witnesses

Among those who appeared before the subcommittee this week were J. M. Hancock, former general manager of the United States delegation to the United Nations Atomic Energy Commission; William Schoenberg, general president, United Cement, Lime and Gypsum Workers International Union, American Federation of Labor; Brigadier General P. F. Yount, deputy chief of the Army Transportation Corps; and spokesmen for the National Small Busi-

GRANT RAILROADS MORE TIME IN LINCOLN ANTI-TRUST SUIT

The 47 Western railroads which are defendants in the government's anti-trust suit at Lincoln, Neb., have been given until January 15, 1949, to file amended or supplemental pleadings and objections to the charge of maintaining non-competitive rates and with acting to retard development of competing forms of transportation.

As noted in the *Railway Age* of October 9, page 79, the carriers asked for an extension so that the Interstate Commerce Commission would have time to rule on rate-making agreements filed by the railroads, as provided by the Bulwinkle-Reed bill. The additional time was granted by Federal Judge John W. Delehant, who declared that "it is obvious that the new statute and the steps within its contemplation to be taken by the carriers and the Interstate Commerce Commission will sharply restrict the scope of this court's action."

ness Men's Association. Also scheduled to appear were spokesmen for the F. T. C. and the anti-trust division of the Department of Justice.

Mr. Hancock, who is a member of Secretary of Commerce Sawyer's Business Advisory Council, described as "most disconcerting" the "constantly repeated notion" that "what is to be lawful or unlawful is to be determined not by reasonably clear Congressional enactment but by theories about an economic market which from time to time occur to the minds of administrative officials." "To leave the authority to determine rules of business conduct to a group of administrative officials," he said, "is to create a monopoly of irresponsibility. It is an invitation to economic tinkering. Unsound regulation will prove ineffectual, yet it will always lead to further regulations."

The "fundamental" question, Mr. Hancock stated, is whether an American businessman, who does not conspire with anyone else, may have freedom to compete either as a buyer or as a seller. "As a buyer," he continued, "is he to retain the opportunity to have every seller of the commodity compete for his patronage by meeting the price of other sellers, either by reducing his factory price, charging the same delivered price as a competitor, absorbing freight, or in any other way? As a seller, is he to be privileged to compete for the patronage of potential customers wherever they are located?"

Mr. Hancock said it is "unrealistic" to assert that the use of delivered pricing or freight equalization permits the distant buyer to be served at an unfair advantage over a nearby buyer. "In every business," he said, "there is a break-even point related to the volume of production. It is a function of management and not of an administrative agency to make these judgments as to when additional volume is worth an expenditure. There is no basis on which to substitute the hindsight judgment of government officials for those of management as to the proper balance between increased volume and additional freight absorption."

Mr. Hancock called upon the committee to (1) "look carefully" at the effects which may flow from the present efforts to restrict the freedom to compete; (2) determine whether the creation of thousands of local monopolies is consistent with the "deeply imbedded" American abhorrence of monopoly in any form; (3) decide whether the "Balkanization of American industry" is preferable to free trade throughout the country; and (4) decide whether, by changing what was formerly lawful, there will be any benefit to the American economy which will offset the possible destruction of savings invested in plant facilities and in the possible uprooting of workers whose specialized skills would have to follow the dispersion of factories.

Mr. Hancock also said he cannot

escape the feeling that many of the present difficulties flow from "administrative action" grounded upon the "unwarranted assumption" that most businessmen are inherently law violators. He went on to describe as a "deeper fallacy" the attempt to regiment business activities to fit "intricate" economic theories. "Those who do so," he charged, "almost always presuppose the existence of a fully matured rather than a dynamic economy. The same fallacy was widely prevalent in the 1930's when the proponents of a planned rather than a free America talked about our having achieved a mature economy."

Labor Testimony

Mr. Schoenberg told the Senate group the F. T. C.'s ruling will result in a "virtual monopoly" of the Chicago cement market by the producers nearest that city. At the same time, he asserted that the Supreme Court may not have had all the facts in the case "including the impact upon our economy as will result, in due time, from enforcement of the Federal Trade Commission's contention."

The F. T. C.'s ruling, Mr. Schoenberg also claims, will have the effect of forcing many cement plants to close and others to move, thereby resulting in the migration of workers and the creation of "ghost towns" comparable to coal-mining communities after the supply has been exhausted.

The adverse effect of the F.T.C.'s ruling upon the New York Air Brake Company, of Watertown, N. Y., was described by C. A. Winslow, former mayor of that city, and also a former public relations officer of the company.

Mr. Winslow said that most of the products manufactured by the air brake company — the largest industry in Watertown—are sold to western railroads. "Most of the metal used by the company," he continued, "is purchased from suppliers 200 to 300 miles distant from Watertown. If the company is compelled to buy its materials on an f.o.b. basis instead of at prices which heretofore have prevailed under the basing point system, and if it is compelled to sell on an f.o.b. basis instead of on the basing point principle, it is easy to see that it will be effected so adversely that it simply will have to move closer to its source of materials supply, and closer to the purchasers of its manufactured products."

Mr. Winslow then referred to a September 29 newspaper article quoting L. K. Sillcox, first vice-president of the company, as saying that unless Congress takes remedial action to enable the company to continue to legally quote delivered prices, it will be necessary for it to move to Pittsburgh, Pa., home of the Westinghouse Air Brake Company. The latter is the "only competitor" of the New York company, Mr. Winslow said, adding that the same newspaper article also goes on

to quote Mr. Sillcox as stating "that the company has already secured an option on property in Pittsburgh."

"If the New York Air Brake Company should leave Watertown," Mr. Winslow concluded, "its employees would either have to relocate in Pittsburgh with it, or they would be out of employment. . . Its machinery unquestionably would be moved to Pittsburgh, and buildings and land would be vacant entirely, or almost so. If the employees should move, we would have 1,200 homes thrown on the market, with no purchasers, and where would these employees find places to live in Pittsburgh? . . ."

General Yount's formal presentation was criticized by Senator Capehart and Senator McMahon, Democrat of Connecticut, because of his failure to give the Department of Army's "national defense" views with respect to the possible concentration of industry as the result of the F.T.C.'s ruling. General Yount said that while he did not think it "necessarily proper" for the Army to comment on the effect of the F.T.C.'s basing point decision, he nevertheless would obtain for the subcommittee the Army's opinion as to whether it favors the concentration or dispersion of industry insofar as it pertains to national defense. At the same time, however, he intimated that the Army was "interested" in dispersing "industrial target areas."

Meanwhile, General Yount declared that "any action" taken to bring about a reduction in the peacetime traffic of the transportation industry, particularly the railroads, will "reduce our potential for war as it will mitigate the industry's ability to expand rapidly."

Would Fix Rate Spreads For Transport Rivals

E. A. Jack proposes plan, seeing no hope for ending of subsidies

Establishment and maintenance of rate differentials, based on "comparable" cost factors and designed to eliminate or at least reduce to a minimum the competition between the unsubsidized railroads and the subsidized carriers," was advocated last week by E. A. Jack, general traffic manager of The Aluminum Company of America. The proposal, made in an address before the Institute of Industrial Transportation and Traffic Management at American University, Washington, D. C., came after Mr. Jack had found "no hope of having subsidies withdrawn from the railroads' competitors," and rejected the idea of a railroad subsidy because "it would only compound the felony."

Meanwhile, he had said that the

K. C. S. SPONSORS RADIO CONCERTS

Broadcasts of 10 concerts by the Kansas City (Mo.) Philharmonic orchestra are currently being sponsored by the Kansas City Southern over radio station WHB (710 on the dial). The first two concerts have already been presented with the remaining eight scheduled from 8:30 to 10:30 p.m. (C.S.T.) November 23, December 7 and 21, January 4 and 18, February 1 and 15 and March 1. The railroad sponsored 20 similar broadcasts during the 1944-45 season.

over-the-road truck, as presently operated, "is largely an economic liability and is one of the reasons for the present high level of freight rates." Of government aid to transport generally, Mr. Jack said that it enabled the subsidized agencies to take business away from the railroads. He added: "The loss of this business so reduces the railroads' revenue that their rates must be increased on that part of the traffic they continue to handle. Such increases in rates enable the competitors to extend their services and dig still deeper into the railroads' legitimate traffic. And so we are off again on the vicious spiral."

"Bare Cost of Operation"

As Mr. Jack described it briefly, his rate-differential plan would use "the bare cost of operation of each facility, the bare cost to be determined by using comparable factors in each case." In the latter connection, he explained that the cost to the railroads of owning, maintaining, and paying taxes on their "rights-of-way, yards and sidings" would be eliminated from the comparison—because none of the competing agencies has such an expense. Mr. Jack's further explanation of proposal was as follows:

"Having arrived at the approximate bare operating costs of each class of carrier, then using the railroad cost as a base, the rates of the other forms of transportation should be differentials higher or lower, as the case may be, than the rail rates proportionate to the difference in their bare operating costs. Under such a plan, the shippers would use the service which best served their needs which, I am sure, would return to the railroads large volumes of freight, thus increasing their earnings and so bringing about a reduction in rates. Such a plan would produce an economic balance between the various forms of transportation and perhaps at long last reveal the inherent advantages of each."

Earlier in his address, the Alcoa executive had expressed his view that "the radius within which a motor truck can operate at lower overall costs than a railroad is not over 150 miles and probably less." He added that if trucks operate for greater distances on rail-

road rates and make a profit, the railroad rate is "too high." Mr. Jack's examples of the growth of long-haul trucking operations included the movement out of Alcoa's plant at Alcoa, Tenn., which ships principally sheet aluminum. The plant "is at least 300 miles from its weighted average market, and, by and large, every pound of its product should move by rail," Mr. Jack said. He went on to estimate, however, that the plant's 1948 shipments by truck will exceed 150 million pounds. Mr. Jack traced the growth of these truck movements since 1937, when the total was 9.7 million pounds; and he pointed out that they increased with each new advance in railroad freight rates.

"A Gospel of Traffic Management"

Mr. Jack's address as a whole was an undertaking, as he put it, "to set up a gospel of traffic management"; to say "something that will help the traffic fraternity, both transport and industrial, to so apply sound principles of traffic direction as to heal such of the sickness of our transportation system chargeable to faulty traffic practices and so do our part to save it from government ownership." He called the railroads' place in the nation's transportation picture "first and foremost."

"They are indispensable," Mr. Jack continued, "and our social and economic well-being demands that they not only be maintained but that they be maintained so healthy and vigorous that they could readily meet any emergency. . . . Any study of the transportation problems of this country which does not start and finish and revolve around that indisputable premise will be worse than useless. Furthermore, the railroad is, by and large, the cheapest form of overland transportation ever devised, and by its very nature, as far as we can see, will always be if it is allowed to function as it is capable of functioning and would function if allowed to."

"Plain Economic Common Sense"

Mr. Jack asked his audience not to regard him as "unduly pro-railroad." He was, so he said, trying only to exercise what he believed to be "just plain economic common sense." And it doesn't make sense to him "to use our taxes to promote uneconomic competition which is bound to injure the instrumentality which we cannot do without and which, in the last analysis, we must tax ourselves to maintain." In Mr. Jack's opinion, that is "like hiring a man to wreck your automobile in order that you can pay to have it repaired." He believes that each form of transportation should be placed "on its own economic feet," and then "let it contract, expand, survive or perish according to its economic worth."

"The railroad," Mr. Jack also said, "is the only form of transportation which pays its way. All the others

are subsidized by the taxpayers to a greater or lesser degree. Neither the motor truck, except in a relatively limited degree, nor the water carriers, except in the immediate Pittsburgh district, nor the airplanes increase the volume of tonnage which would move in any event. With the exception of some hinterland movement of the motor trucks, these instrumentalities have not increased the volume of commerce one iota. All they have done is to take business away from the railroads. Neither the motor truck, the barge

lines nor the airplanes could continue to operate on their present rates and charges if they had to pay their way as the railroads do. . . .

"If all subsidies were withdrawn from the railroads' competitors and our whole transportation system so coordinated as to make use of each to the limit of its economic sphere, not only would the cost of transportation in this country drop considerably, but, as to the trucks, the states, counties, and municipalities would save untold thousands of dollars in road and street

Selected Income and Balance-Sheet Items of Class I Steam Railways in the United States

Compiled from 127 reports (Form IBS) representing 131 steam railways
(SWITCHING AND TERMINAL COMPANIES NOT INCLUDED)

Income Items	United States			
	For month of July 1948	For month of July 1947	For the seven months of 1948	For the seven months of 1947
1. Net railway operating income.....	\$105,256,808	\$61,197,824	\$516,189,529	\$430,603,566
2. Other income.....	16,138,416	16,526,785	127,370,333	115,046,563
3. Total income.....	121,395,224	77,724,609	643,559,862	545,650,129
4. Miscellaneous deductions from income	5,056,191	6,376,832	39,107,323	24,972,723
5. Income available for fixed charges ..	116,339,033	71,347,777	604,452,539	520,677,406
6. Fixed charges:				
6-01. Rent for leased roads and equipment.....	12,280,085	8,204,373	76,254,475	71,136,583
6-02. Interest deductions ¹	24,138,553	25,904,975	168,275,234	182,315,647
6-03. Other deductions.....	166,769	165,284	1,029,933	1,022,231
6-04. Total fixed charges.....	36,585,407	34,274,632	245,559,642	254,474,461
7. Income after fixed charges.....	79,753,626	37,073,145	358,892,897	266,202,945
8. Other deductions.....	3,279,417	2,734,780	22,864,769	20,132,238
9. Net income.....	76,474,209	34,338,365	336,028,128	246,070,707
10. Depreciation (Way and structures and Equipment).....	31,221,196	29,459,025	214,897,703	204,766,484
11. Amortization of defense projects.....	1,373,752	1,346,596	9,897,856	9,472,997
12. Federal income taxes.....	48,854,376	21,322,717	220,757,605	165,234,606
13. Dividend appropriations:				
13-01. On common stock.....	4,911,593	3,524,813	85,462,063	74,050,798
13-02. On preferred stock.....	1,088,075	1,365,765	34,573,130	23,610,311
Ratio of income to fixed charges (Item 5 ÷ 6-04).....	3.18	2.08	2.46	2.05
United States				
Balance at end of July				
1948 1947				
Selected Expenditure and Asset Items				
17. Expenditures (gross) for additions and betterments—Road.....	\$176,602,186	\$146,464,017		
18. Expenditures (gross) for additions and betterments—Equipment..	478,849,648	271,270,422		
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707).....	533,352,513	567,774,220		
20. Other unadjusted debits.....	149,466,720	185,296,558		
21. Cash.....	929,591,412	953,312,501		
22. Temporary cash investments.....	947,999,986	964,704,178		
23. Special deposits.....	127,172,906	155,453,724		
24. Loans and bills receivable.....	12,477,600	5,624,049		
25. Traffic and car-service balances—Dr.....	56,330,563	46,460,747		
26. Net balance receivable from agents and conductors.....	132,053,266	119,175,682		
27. Miscellaneous accounts receivable.....	341,713,219	284,317,704		
28. Materials and supplies.....	823,721,036	739,557,109		
29. Interest and dividends receivable.....	13,816,307	13,300,198		
30. Accrued accounts receivable.....	180,974,610	155,642,122		
31. Other current assets.....	36,357,403	32,976,416		
32. Total current assets (items 21 to 31).....	3,602,208,308	3,470,524,430		
40. Funded debt maturing within 6 months ²	\$118,653,708	\$84,354,922		
41. Loans and bills payable ³	3,150,000	5,550,000		
42. Traffic and car-service balances—Cr.....	94,281,726	82,845,310		
43. Audited accounts and wages payable.....	494,873,478	456,089,683		
44. Miscellaneous accounts payable.....	244,355,915	227,723,240		
45. Interest matured unpaid.....	28,918,614	40,109,092		
46. Dividends matured unpaid.....	10,176,412	7,552,649		
47. Unmatured interest accrued.....	67,933,979	60,369,292		
48. Unmatured dividends declared.....	17,593,727	13,510,554		
49. Accrued accounts payable.....	212,715,080	165,493,762		
50. Taxes accrued.....	719,344,880	602,937,738		
51. Other current liabilities.....	89,757,721	96,656,611		
52. Total current liabilities (items 41 to 51).....	1,983,101,532	1,758,837,931		
53. Analysis of taxes accrued:				
53-01. U. S. Government taxes.....	562,632,664	456,864,208		
53-02. Other than U. S. Government taxes.....	156,712,216	146,073,530		
54. Other unadjusted credits.....	295,700,124	351,714,915		

¹ Represents accruals, including the amount in default.

² Includes payments of principal of long-term debt (other than long-term debt in default) which becomes due within six months after close of month of report.

³ Includes obligations which mature not more than one year after date of issue.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

construction and maintenance, to say nothing of the saving of lives and limbs and property losses incurred through traffic accidents due to the cluttering up of the highways by over-the-road motor trucks. And as to other agencies, the federal government would save the million dollar a year deficit in its Federal Barge Line operations plus the millions it appropriates for capital expenditures, and also plus the millions more of the taxpayers' money the government spends to maintain various traffic assists to other users of the rivers, all of which are provided gratis, and the cities and the federal government would not have to take still more of my dollars and your dollars which they are now spending to build, equip and maintain airports and the various additional services now provided."

Mr. Jack's comment on water carriers was restricted to those operating on "rivers and canals." He also conceded that "the illegitimate competition of subsidized agencies is not all that ails the railroads"; but he insisted that it is the ailment "for which we traffic men must find the healing solution."

Will Require 3 Days' Notice to Cancel Florida Pullman Tickets

The Pullman Company has filed with the Interstate Commerce Commission an amended tariff which requires that, effective from December 15, 1948, to May 15, 1949, tickets for sleeping car accommodations on trains serving the resort regions of Florida must be redeemed not later than the third day preceding departure of the train for which sold. The company states that the rule will apply to traffic from New York, Washington, D. C., and intermediate points to destinations in Florida south of Jacksonville, and northbound

from points south of Jacksonville to destinations in northern and eastern states.

As noted in the *Railway Age* of March 20, page 95, a similar regulation was in effect from March 10 to May 15, 1948, requiring two days' notice for redemption of Pullman tickets on trains northbound from Florida. E. P. Burke, passenger traffic manager, said the success of this regulation in releasing space prompted the company to adopt the rule for the coming season, covering also southbound traffic and with an additional day's notice required for ticket cancellation.

Commuter Fares Go Up on I. C.

The Illinois Commerce Commission on November 5 authorized the Illinois Central to increase its commutation fares by eight per cent. As noted in the *Railway Age* of October 16, page 80, the I. C. filed the proposed boost with the state body on October 2, declaring that the road lost \$63,000 on its commuter service between May 6 and October 1 of this year. Early in October, also as reported in the *Railway Age* of October 16, the Chicago & North Western obtained an eight per cent commuter fare increase by a court order restraining the state commission from blocking the raise.

Uniform Classification Committee Begins Hearings on Docket No. 2

In compliance with the Interstate Commerce Commission's order in the No. 28310 proceedings, requiring the railroads to "undertake to make and tender a uniform classification," the railroads' Committee on Uniform Classification began hearings at New York on November 8 on its own Docket No. 2, Proposed Uniform Classification Ratings, items Nos. 5 through 14455, inclusive, abrasives through curtain rods.

Additional hearings on this same docket, beginning on the dates indicated, will be held at Chicago—Union Station, November 15; Atlanta, Ga.—101 Marietta street, November 22; Dallas, Tex.—Baker Hotel, November 29; Denver, Col.—State Office bldg., December 2; Seattle, Wash.—Chamber of Commerce, December 7; and San Francisco, Cal.—Pacific Freight Tariff Bureau, December 13.

Docket No. 2 is the second of a series to be issued and scheduled for public hearings. In its preparation, according to the foreword, "the committee has followed as closely as possible the commission's admonition to produce a classification which will 'insure proper preservation of revenues for the carriers' and which will produce rates which 'shall be just and reasonable as respects the shipper.' . . . Uniform ratings on articles named in this docket will not be published until all items in the classification have been considered

CALIFORNIANS VOTE REPEAL OF FEATHERBEDDING LAW

"Proposition No. 3" to amend the featherbedding provisions of California's excess crew law (see *Railway Age* of October 23, page 41) was passed by a referendum vote at the state's general election on November 2. The law as it stood for the past 37 years provided that from three to nine brakemen man all freight trains operating in the state. The requirements for excess crewmen varied on an arbitrary basis, according to track grades and train lengths. The provision of excess brakemen in compliance with the law has been estimated to cost the four major California roads \$3,000,000 annually.

The amendment which won approval of the voters on November 2 places in the hands of the Public Utilities Commission the responsibility for determining the safe and proper number of brakemen required. The proposition was sponsored by the four principal roads operating in the state. An intensive campaign carried on by a "committee against featherbedding" apprised the general public as to the cost to them of this outdated "make-work legislation," stating in its releases that "this is not just a railroad issue . . . featherbedding is a pernicious practice which has spread from the railroads—where it began—to countless other industries, and is costing California producers and consumers untold millions."

and a complete uniform classification submitted."

Members of the committee are A. H. Greenly, chairman, R. E. Boyle, Jr., and G. H. Dumas, chairmen, respectively, of the Official, Southern and Western Classification Committees.

More Data on Car Types Used for 1947 Loadings

The Bureau of Transport Economics and Statistics of the Interstate Commerce Commission has issued tabulations showing, on a one-per-cent-sample basis, the number of carloads of freight by commodity classes moved in various types of cars during the third and fourth quarters of 1947. The compilation, Statement No. 4840, is one of the bureau's so-called waybill studies. It is like a previous compilation (Statement No. 489) of like data for last year's first and second quarters.

New Haven Installs Ticket Printer in Grand Central

The New Haven has installed an automatic ticket printer at one of its ticket windows in Grand Central Terminal, New York, it was announced this week. Designed especially for New Haven operation, the machine prints tickets for either one-way or round-trip tickets, for adults and children. It has been installed on an experimental

WILLIAMS SAYS CENTENNIALS OFFER RARE PROMOTIONAL OPPORTUNITIES

Many promotional prizes may be reaped by those railroads and railroad supply companies which have centennials to celebrate, R. L. Williams, president of the Chicago & North Western, declared in an address before the Western Railway Club on November 8. The speaker told of the North Western's centennial celebration, its inception, development and success, pointing out that such an event offers a rare opportunity to widen influence, to create good will and even to increase business.

The North Western president told some 1,000 guests at the club's dinner meeting that companies having a centennial to celebrate are obligated to themselves and to their stockholders "to do something about it." Mr. Williams was introduced by Ralph Budd, president of the Burlington Lines, who spoke briefly on the early history of both the North Western and the Burlington.

READING'S 9-CAR "SCHUYLKILL" TO GO IN SERVICE NOVEMBER 14 WITH THOROUGHLY MODERNIZED EQUIPMENT



With a grill-coach (above), three reclining seat coaches with smoking lounge (below), a baggage-coach combination and four coaches with conventional seats, this steam-powered train will provide 564 seats in twice-daily round-trip service on an accelerated schedule between Philadelphia, Reading, and Pottsville, Pa. The locomotives were built, and the cars rebuilt, in the road's Reading shops. The grill car and reclining seat coach have extra-width double-glass windows, individual seat lighting, varying interior color schemes in pastel shades, and automatically controlled heating. All cars are air-conditioned and have roller-bearing four-wheel trucks



basis, the road said, but if the test continues as satisfactorily as it has begun the operation will be extended to other Grand Central ticket windows as well as to other stations.

Supreme Court Will Hear Norfolk Wharfage Case

By noting "probable jurisdiction" in the case, the United States Supreme Court has indicated its disposition to review the ruling of a statutory three-judge federal court which dismissed a

complaint whereby the Department of Justice sought to set aside an Interstate Commerce Commission ruling that the railroads' refusal to make an allowance for wharfage and handling service performed by the Army on its World War II shipments moving over its piers at Norfolk, Va., was not an unjust and unreasonable practice. The three-judge court, which sat in the United States District Court for the District of Columbia, did not reach the merits of the case, but dismissed the complaint with a holding that the

United States could not sue itself (see *Railway Age* of July 17, page 49).

The assailed commission decision was noted in the *Railway Age* of August 30, 1947, page 57. As reported there, the controversy arose in June, 1942, when the Army took over Norfolk piers formerly operated by public wharfingers whose charges were absorbed by the railroads. The carriers refused to make an allowance to the Army equivalent to the previous absorption of 4 cents per 100 lb., the refusal having been based on the applicable tariffs which restricted the holding-out to load and unload car-load export freight to that moving over so-called public piers, i.e., those operated by railroads, steamship companies, or public wharfingers. The government's claim, which the commission denied, was for reparations at the rate of 4 cents per 100 lb. on all freight on which the Army performed its own pier services.

Long Island Prepares for Adverse Winter Weather

The Long Island recently filed with the New York Public Service Commission a detailed program, covering more than 100 pages, for maintaining all possible train service under adverse winter weather conditions. The program calls for closely integrated action by more than 4,000 employees in the road's operating departments and full use of diversified snow-fighting devices on both electrified and steam-operated lines. One of the most important features of the program, the road said, is a plan for the operation of patrol trains with varying frequency, depending upon the severity of the bad weather and what time of day these conditions prevail.

Issues Chart and Pamphlet on I.C.C. Organization

The Association of Interstate Commerce Commission Practitioners has issued a chart showing the major functions of the commission, and a pamphlet which describes the organization of commission divisions and the assignment of its work. Copies may be obtained from the association, 2218 I.C.C. Building, Washington, D. C., the price of chart and pamphlet together being \$1.

Future of Railroads Largely Political, Says Woodruff

The railroads need higher rates to modernize and improve their services, which will ultimately result in lower costs to shippers, R. E. Woodruff, president of the Erie, told the Cleveland, Ohio, Traffic Club on November 8.

"The average revenue received by the railroads for hauling a ton of freight one mile," Mr. Woodruff said, "is no higher today than it was 27 years ago. In the meantime, wages have doubled, taxes have doubled and the cost of

everything else railroads use has increased tremendously." He pointed out that in 1921 railroads received an average revenue of 1-1/4 cents a ton-mile. As a result of huge investments in new equipment and improvements immediately following World War I the average dropped to less than one cent (9.3 mills). Rate increases in the last few years have raised this to 1.26 cents, or about the same as in 1921.

"When costs go up," Mr. Woodruff added, "the price of our service must go up. To lower the cost of transportation in the future, we must install new and better equipment. . . . Cars cost about \$5,000 each at today's prices whereas old cars being retired originally cost \$2,000. A new four-unit Diesel locomotive costs around \$640,000 while the steam locomotive it replaces cost a little over \$100,000. This means that depreciation money from old equipment does not provide enough for replacement and must be supplemented by new money. Most of this has to be borrowed through the issuance of bonds.

"Last year," he continued, "the rate of return to railroads on net invested capital was only 3.4 per cent and this year it will be just a little more than 4 per cent—an improvement, yes, but still no where near where it should be. The railroads feel they're entitled to a 6 per cent return like other regulated industries. . . . The oil industry, the steel industry and many others are setting aside large amounts now for modernization. They are defending their high earnings with the argument that they need this money for future expansion. The railroads also need modernization but we are not getting sufficient earnings to do the job."

Mr. Woodruff also told his audience that when costs go up in other industries they can immediately increase their selling price, while railroads must secure authority from the Interstate Commerce Commission. This always involves a long delay and in the meantime they must absorb higher operating costs. "In the last rate case," he declared, "we had to wait 13 months for a final decision. People think we have had big increases in rates in recent years. That is because the commission granted three partial increases and all three put together were not sufficient to meet our needs. Since the war freight rates have gone up an average of only 44 per cent while the cost of everything else has increased about twice that much.

"The future of the railroads is largely political. Our rates are set by government agency; our wages are largely determined by government action; and our taxes are set by the government. We have to look to our customers for help because in our economic life the customer is still boss. If you want to drive us into socialism as happened over in England when not enough was spent for modernization, then it will happen here too because, after all,

they're your railroads and they will be the kind of railroads you allow them to be," he concluded.

W. A. Newman Receives A.S.M. Service Award

W. A. Newman, manager of the Canadian Pacific's department of research, was selected recently to receive the distinguished service award of the American Society of Metals. The award cited Mr. Newman's "valuable contribution to the advancement and progress of alloy steel."

Malcom Erickson, Colorado Utilities Commission Chairman, Dies

B. Malcom Erickson, chairman of the Public Utilities Commission of Colorado, died at St. Luke's hospital, Denver, Col., on November 2, following a brief illness. Mr. Erickson, who was born at Greeley, Col., in 1889, had been a member of the Colorado commission since February 1, 1935. He was also a member of the executive committee of the National Association of Railroad and Utilities Commissioners.

Non-Op Emergency Board Hears More Employee Testimony

The three-man fact-finding board appointed by President Truman to report on the dispute between non-operating employees and the carriers over the brotherhoods' demand for a shorter work week and more pay started its second week of hearings on November 3. The employees were expected to complete their presentation on November 9, and the carriers to begin presentation of their case on November 10.

George M. Harrison, president of the Brotherhood of Railway & Steamship Clerks, Freight Handlers, Express & Station Employees, admitted that, even if the railroads had to pay for Saturday and Sunday work at time and one-half and double time, respectively (as the non-ops seek) they would still have to utilize approximately 30 per cent of the clerical employees on Saturdays and 15 per cent on Sundays—a total of 135,000 man-days for essential week-end work at punitive rates. Mr. Harrison said that it would not help to set up relief assignments because everyone who worked on Saturday or Sunday would be paid at the overtime rates, according to the employees' proposals.

George E. Brown, international vice-president of the Hotel & Restaurant Employees & Bartenders International Union testified in behalf of the dining service employees, who are asking for a monthly guarantee of 169 1/3 hr., with overtime for Saturday and Sunday work, in place of the present 240 hr. a month, without any reduction in the basic pay.

In cross-examination it was brought

out that, under the proposed agreement, members of a dining car crew which worked, for example, four hours on a breakfast run, would receive twelve hours' pay on a Saturday, or sixteen hours' pay on Sunday for this service. Mr. Brown was not able to offer any suggestions as to how Saturday or Sunday work might be eliminated, but did think that swing runs, instead of through runs, might cut down some overtime and favor the employees. He spoke favorably of those roads which have provided dormitory space for crews, instead of requiring them to sleep in the diners, and intimated that the union might not insist that men be paid during the hours they are in bed, as long as proper train sleeping accommodations are provided.

W. J. Van Buren, national secretary-treasurer of the National Organization of Master Mates & Pilots of America testified that marine railway employees resented working a 48-hr. week "when everybody else around them is working 40 hours."

M. G. Schoch, president of the Railway Yardmasters of America, described the duties and responsibilities of the yardmasters, for whom he claims 70 per cent representation. He admitted that yardmasters are "one of the relatively few groups in which large numbers actually have to work on Saturdays and Sundays," but maintained that they constitute "a very small part of the whole group involved in the proceedings."

Jesse Clark, grand president of the Brotherhood of Railroad Signalmen of America, declared that "the signalman's wage is inadequate to permit him to maintain himself and his family on even a minimum standard of living designed for manual workers. Even though he were permitted to earn an amount necessary to maintain himself and family on a decent standard of living, he is unable to enjoy it," Mr. Clark complained, "because of the long work week and the necessity of holding himself available for his carrier's service at all times." Mr. Clark said that he was not trying to minimize the necessity of having continuous service of employees in the signal department, but insisted that, if the employees were placed on a 40-hr. week, methods would be found to protect the service without "unduly" burdening the carriers with penalty overtime.

George E. Leighty, president of the Order of Railroad Telegraphers, outlined the duties and responsibilities of employees represented by that organization. He said that it is becoming increasingly difficult to interest young men in railroading as a vocation or a career because they are "reluctant to align themselves with an industry that pursues an archaic policy of a 48 to 56-hr. week." He stated that about 24,000 employees in his group—just over 50 per cent—are working on Sundays; that that is not "the irreducible

minimum, because we always find new ways and means." Mr. Leighty said that about 47,000 men in his craft are working on Saturdays, and that he wouldn't care to make an estimate of how many of these Saturday jobs could be eliminated, other than that it would be "substantially less than 100 per cent and substantially more than 50 per cent."

The opening hearings before the board were reported in the *Railway Age* of October 30, page 96.

Long Island Asks 25 Per Cent Increase in Commutation Fares

In a petition filed with the New York Public Service Commission on November 9 the Long Island has asked authority to put into effect at the earliest possible date, without suspension and upon one day's notice, an average temporary increase of 25 per cent in its commutation fares.

It also asked, in the same petition, for authority to issue two forms of monthly commutation tickets—one not valid on Saturdays, Sundays or holidays, and the other good, as at present, on all days, both forms, however, to provide for an unlimited number of rides. To produce the desired over-all increase of 25 per cent in commutation revenue, it proposes to price the new restricted monthly ticket—which it estimates would be purchased by 70 per cent of its commuters—at 20.97 per cent above the present 60-trip monthly ticket. The new unrestricted monthly ticket would be priced 34.41 per cent higher than the present monthly ticket, which it would replace. Weekly tickets would be one-fourth the price of the proposed unrestricted monthly tickets; 46-trip monthly school tickets would be advanced by 25 per cent; Pennsylvania station single-trip supplemental fares would be increased from six to 10 cents, with 10-trip supplemental tickets at 75 cents; and all fares, as increased, not ending in 0 or 5 would be advanced to the next 0 or 5.

The petition states in part:

"These increases are urgently needed to offset, in part, greatly increased operating costs pending a final decision in a proceeding before the commission involving the railroad's commutation fares. . . . A temporary increase of 20 per cent in the Long Island's commutation fares was authorized by the commission, effective July 14, 1947, and was raised to 25 per cent as of July 1, 1948. This was the only increase in commutation fares since 1918.

"The railroad's costs, due to causes wholly beyond its control, have been increasing and are still increasing at a rate which is inevitably resulting in increasing deficits from operation. . . . For the full year 1948 it is estimated there will be a net income deficit of \$5,632,000. This is in contrast with a deficit of \$3,996,000 in 1947 and a deficit of \$1,188,000 in 1946.

"In contrast to increases in revenue of \$15,042,000 per year through increases in fares and rates since 1940, only \$2,400,000 of which resulted from the increase in commutation fares, operating expenses during the same period have risen by \$20,250,000 per year due to successive wage increases and continuing increases in the costs of materials, supplies and fuel. . . . \$7,133,000 represents increases in such costs since March, 1947. . . .

"The interim increases in commutation fares now sought are expected to produce additional revenue of \$3,252,000 per year on the basis of present traffic volume. Although

these increases will be insufficient to erase the deficits being incurred, they will provide substantial relief to the railroad in meeting increased costs and will place upon commutation traffic a more proper share of the increased expense burden. . . ."

The petition also notes that the road is now making a study of the costs of transporting its various classes of passengers, which, however, cannot be completed before next spring; and that, "despite continued substantial deficits," it has "kept faith" with its commitment to a three-year, \$16 million car, station and track improvement program originally outlined in March, 1947, and reported in detail in previous issues of *Railway Age*, even though the estimated cost of the program has now risen to well over \$18 million.

Freight Car Loadings

At the time of going to press, the carloadings for the week ended November 6 were not available.

Loadings of revenue freight for the week ended October 30 totaled 931,750 cars, and the summary for that week as compiled by the Car Service Division, Association of American Railroads, follows:

Revenue Freight Car Loadings			
For the week ended Saturday, October 30			
District	1948	1947	1946
Eastern	162,348	167,361	169,579
Allegheny	186,484	194,706	191,998
Pocahontas	71,428	75,758	69,115
Southern	144,908	142,109	142,994
Northwestern	142,290	137,850	135,888
Central	148,740	150,722	146,232
Southwestern	75,552	72,240	66,506
Total Western Districts	366,582	360,812	348,626
Total All Rds.	931,750	940,746	922,312
Commodities:			
Grain and grain products	58,244	52,064	52,165
Livestock	19,931	21,678	25,354
Coal	179,621	187,909	182,235
Coke	15,434	14,610	13,819
Forest products	51,447	48,591	46,804
Ore	68,855	62,208	58,457
Merch. l.c.l.	110,614	123,258	130,773
Miscel.	427,604	430,428	412,705
October 30	931,750	940,746	922,312
October 23	927,532	954,627	942,257
October 16	913,832	954,149	931,766
October 9	891,811	956,862	899,443
October 2	908,581	942,455	907,168
Cumulative total			
43 weeks	36,587,234	37,854,511	35,021,318

In Canada.—Carloadings for the week ended October 30 totaled 91,603 cars as compared with 91,121 cars for the previous week, and 89,788 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

			Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:				
October 30, 1948			91,603	36,740
November 1, 1947			89,788	39,654
Cumulative totals for Canada:				
October 30, 1948			3,437,306	1,619,625
November 1, 1947			3,314,378	1,619,049

N. Y. C. to Revise Passenger Train Service in December

The New York Central System has announced it will make a number of revisions in its passenger train service when winter schedules are inaugurated on December 5. Fred H. Baird, general passenger traffic manager, in making

the announcement, said: "The adjustments will affect relatively few of the approximately 1,000 passenger trains operated daily by the Central. Some trains will be eliminated or combined with others, some will operate with shorter runs, and some will have a few additional stops in order to provide good substitute service."

"Our passenger schedules," Mr. Baird added, "which were expanded greatly to provide for the heavy traffic of wartime and the period which followed, are adjusted several times a year to conform with travel trends. The new

(Continued on page 83)

Additional General News
on pages 83 and 84

ORGANIZATIONS

The **Toronto Railway Club** has scheduled a meeting for November 22, to be held at the Royal York Hotel, Toronto, Ont., at 8 p.m. The program will include a discussion of "Forestry in Ontario" by A. R. Fenwick, executive assistant in charge of information and education, Department of Lands and Forests. The film "Temagami Ranger" will also be shown.

At the annual meeting of the **Car Foremen's Association of Chicago**, held on October 15, at the Hotel LaSalle, the following officers were elected for 1948-49: President, C. A. Mick, office manager, mechanical, C. B. & Q.; first vice-president, W. J. O'Brien, general car foreman, N. Y. C. & St. L.; second vice-president, E. W. Gebhardt, assistant superintendent car department, C. & N. W.; treasurer, C. J. Nelson, superintendent, Chicago Car Interchange Bureau; secretary, J. A. Dinges, Union Tank Car Company.

R. G. Robinson, superintendent of dining service of the Pennsylvania, with headquarters at Long Island City, N. Y., was recently elected vice-president of the **Association of American Railroad Dining Car Officers**. Re-elected as secretary-treasurer was W. F. Ziervogel, superintendent of dining and parlor cars of the Missouri Pacific lines at St. Louis, Mo. As noted in the *Railway Age* of October 16, P. E. Griffith, superintendent of dining cars for the Wabash, at St. Louis, was elected president of the association.

Robert A. Henderson of the Socony-Vacuum Oil Company was elected president of the **Metropolitan Traffic Association of New York** at its October 14 meeting. Other officers are: First vice-president, Edward J. McCabe of the McLean Trucking Company; second vice-president, Joseph J. Donnelly of the New York, Ontario & Western;

secretary, Joseph A. Dowling of the Central of Georgia; treasurer, Vincent P. Golden of the Union Bag & Paper Co.; and financial secretary, William H. Croissant, Jr., of the Ethyl Specialties Corporation.

The Car Department Association of St. Louis will hold its next meeting on November 23, at 8:00 p.m., at the Hotel DeSoto, St. Louis, Mo. This meeting is the organization's annual "Honor Night" meeting at which special honor will be given to R. G. Setzekorn, mechanical superintendent, American Refrigerator Transit Company, following his address on "The Development and Use of Refrigerator Cars."

A.S.M.E. Annual Meeting

The Hotel Pennsylvania, New York, will be the headquarters for the annual meeting of the American Society of Mechanical Engineers November 28 to December 3, inclusive. The tentative program includes the following sessions of particular interest to railroad mechanical officers:

MONDAY, NOVEMBER 29

2:30 p.m.

Gas-Turbine Power (I)—Machine Design (I) Mechanical Investigations of Gas-Turbine Components, by Carl Schabtach, staff assistant to manager of engineering, apparatus department, General Electric Company.

Current Design Practices for Gas-Turbine Power Elements, by H. D. Emmert, Jr., engineer-in-charge, turbo-power development department, research section, Allis-Chalmers Manufacturing Company.

8:15 p.m.

Gas-Turbine Power (II)—Fuels (I)—Power (I)

Gas-Turbine Locomotive Units—Combustion Chamber Development for Burning Heavy Oil, by B. O. Buckland and D. C. Berkey, General Electric Company.

Effects of Fuel Properties on the Performance of the Turbine-Engine Combustor, by L. C. Gibbons, National Advisory Committee for Aeronautics, Washington, D. C.

NACA Research on Cooling of Gas-Turbine Blades, by O. W. Schey, chief of the compressor and turbine research division, National Advisory Committee for Aeronautics, Washington, D. C.

TUESDAY, NOVEMBER 30

9:30 a.m.

Gas-Turbine Power (III)—Railroad (I)—Fuels (II)—Power (II)

A 5,000-kw. Gas-Turbine for Power Generation, by Alan Howard and C. J. Walker, General Electric Company.

Tests of a 4,800-Hp. Gas-Turbine Power Plant, by Alan Howard, and B. O. Buckland, General Electric Company.

WEDNESDAY, DECEMBER 1

9:30 a.m.

Railroad (II)—Industrial Instruments and Regulators (III)

Progress in Railway Mechanical Engineering—Report of Committee RR-6 Survey, by T. F. Perkinson, assistant manager, transportation engineering division, General Electric Company.

Locomotive Proportions and Transmission Systems, by Rupen Eksbergian, chief consulting engineer, Budd Company.

Symposium—Non-Destructive Testing of Parts and Assemblies from Motive-Power and Rolling Stock

Magnetic Particle Testing, by L. B. Jones, consulting engineer, Paoli, Pa.

Fluorescent Liquid Inspection, by Ray McBrien, engineer of standards and research, Denver & Rio Grande Western.

Theory of Ultrasonic Materials Testing, by E. VanValkenburg, development engineer, General Electric Company.

Ultrasonic Instruments for Nondestructive Testing, by D. Farmer, electrical engineering supervisor, Sperry Products, Inc.

Practice, by Earl Hall, engineer of tests, Erie.

12:15 p.m.

Fuels Luncheon

Synthetic Liquid Fuel Research, by W. C. Schroeder, chief, synthetic fuels branch, U. S. Bureau of Mines, Washington, D. C.

1:30 p.m.

Railroad (III)—Industrial Instruments and Regulators (IV)

What Is a Press Fit?

Theory and Laboratory Investigation, by H. J. Schrader, professor, department of theoretical and applied mechanics, University of Illinois.

Practical Considerations in Railroad Work, by E. H. Weston, mechanical engineer, Chicago & North Western.

Problems of a Locomotive Builder, by J. K. Erzer, section engineer, locomotive engineering division, General Electric Company.

6:30 p.m.

Annual dinner and Honors Night

THURSDAY, DECEMBER 2

9:30 a.m.

Railroad (IV)

High-Speed Freight Trains and Equipment

Traffic Considerations Leading to the Establishment of High-Speed Freight Service and Related Operating Problems, by F. N. Nye, assistant to general freight traffic manager, New York Central System.

Protection of Lading and Equipment, by Paul W. Kiefer, chief engineer motive power and rolling stock, A. M. Miers, assistant engineer, rolling stock department, and L. D. Hays, air-brake engineer, New York Central System.

12:15 p.m.

Railroad Division Luncheon

2:00 p.m.

Railroad (V)

Braking Problems, by C. F. Hammer, engineering manager, Westinghouse Air Brake Company.

Journal Bearings for High-Speed Freight Service

Roller Bearings, by W. C. Sanders, general manager, railway division, Timken Roller Bearing Company.

Solid Bearings, by E. S. Pearce, president, Railway Service & Supply Co., R. J. Shoemaker, chief engineer, Magnus Metal Division, National Lead Company, and I. E. Cox, vice-president in charge of engineering, American Brake Shoe Company, National Bearing Division.

ABANDONMENTS

North Shore May Abandon Its Chicago-Waukegan Branch Line

At a meeting on December 15, the directors of the Chicago, North Shore & Milwaukee will consider the possible abandonment of its so-called Shore Line branch. The road states that it lost more than \$600,000 last year on operation of the line, which runs between Chicago and Waukegan, Ill. The Illinois Commerce Commission is presently conducting a study of operations on the branch and is expected to render its findings to the road prior to the December meeting.

As noted in the *Railway Age* of July 3, page 44, service on the Shore Line branch was resumed on June 30 on a "test" basis, following a two-month strike of the road's employees. At the same time, fares were increased as much as 8 per cent in some instances in a move to meet the increased cost of wages. The company, however, has maintained all along that the branch cannot be operated profitably. If the commission's findings substantiate this contention, the road plans to file the

necessary petitions seeking abandonment of the line.

SUPPLY TRADE

Railway Supply Groups Limit Exhibits to Alternate Years

As a result of correlated, yet independent, action on the part of the governing bodies of the National Railway Appliances Association, the Track Supply Association and the Bridge and Building Supply Men's Association, these three groups have adopted similar resolutions calling for the holding of exhibits in alternate years—The N. R. A. A. in March, and the Track Supply and Bridge and Building Supply Men's Associations, jointly, in September. As a result of these actions, the Track Supply and Bridge and Building Supply Men's Association will not exhibit in September, 1949, in conjunction with the concurrent annual meetings of the Roadmasters' and Bridge and Building Associations, and the N. R. A. A. will not exhibit in March, 1950, in conjunction with the annual meeting of the American Railway Engineering Association. The N. R. A. A. will, as previously planned and announced, present an exhibit in March, 1949, at the Coliseum, Chicago, during the Golden Anniversary Convention of the A. R. E. A. By appropriate resolutions, the Track Supply Association and the Bridge and Building Supply Men's Association have accepted an invitation extended to them by the N. R. A. A. to display their banners and membership lists at the March, 1949, exhibit in joint recognition by the industry of the important occasion being celebrated by the American Railway Engineering Association.

Fred R. McComb, field engineer in Indiana for the Portland Cement Association, has been appointed district engineer of the association's Minneapolis, Minn., office. He succeeds Frank S. Altman, who has retired after 28 years of service with the association. The company also has announced the appointment of John F. Hall, formerly field engineer in New York, as district engineer in charge of the New York office, to succeed E. M. Fleming, who has retired at his own request after more than 22 years' service.

F. E. Van Hoesen, whose association with the transportation seat division of Tropic-Aire, Incorporated, at Chicago, was reported in the *Railway Age* of September 18, studied mechanical engineering at Stevens Institute. He enlisted in the U. S. Naval Reserve in 1917 and was subsequently commissioned a lieutenant. Mr. Van Hoesen was engaged in power plant and boiler construction and sales during the years 1921 to 1929,

and in the following year he joined the Hale & Kilburn Company, with which he served as western sales manager until the company's liquidation in 1934. At that time he became sales manager of the Coach & Car Equipment Company, later advancing to vice-president in



F. E. Van Hoesen

charge of sales. Mr. Van Hoesen has been associated with the Transportation Seat Company since its organization in 1937. In his new position with the Tropic-Aire he will direct the sales activities of the firm's transportation seat division.

William J. McGraw, manager of electric tool sales in the New York territory of the Independent Pneumatic Tool Company, has been appointed manager of the Cleveland, Ohio, branch. Mr. McGraw will be succeeded by E. B. Rosell, electric tool service engineer in the Chicago branch territory.

The Union Asbestos & Rubber Co. has appointed Frank L. Myers to head its newly established glass fiber department, with headquarters at 1811 S. 54th avenue, Cicero 50, Ill. Mr. Myers was associated with the Owens-Corning Fiberglass Corporation for 17 years.

The Reynolds Metals Company, Louisville, Ky., has announced the appointments of the American Brass & Copper Co., Oakland, Cal., and the Western Metals & Supply Co., San Diego, Cal., as distributors of Reynolds aluminum products.

G. B. Davis, assistant sales manager of the Baker-Raulang Company, Cleveland, Ohio, has been promoted to sales manager. Mr. Davis became associated with Baker-Raulang in 1935 and two years later joined the sales staff of the Baker industrial truck division.

The Stonbard Company has announced its removal to new quarters at 1306 Spring Garden street, Philadelphia 23, Pa.

The Dampney Company of America, Boston, Mass., has announced the appointment of the R. J. Denton Company,

Syracuse, N. Y., as distributor in the Syracuse area for Apexior and Thurma-Lox protective coatings.

The Cleco division of the Reed Roller Bit Company has announced the appointment of Edward C. Nissen as special representative, with headquarters at 607 Market street, San Francisco, Calif. Mr. Nissen will act as liaison between the general sales office in Houston, Tex., and local dealer organizations.

Curtis G. Green, whose appointment as manager of the Chicago district office of the Baldwin Locomotive Works was reported in the *Railway Age* of September 18, was born in St. James Parrish, La. He has been connected with Baldwin since 1920 in various sales and en-



Curtis G. Green

gineering capacities which took him into all parts of the country. He has been closely associated with all phases of the firm's locomotive activities, and for two years immediately prior to his recent appointment was manager of Mexican sales.

Kennametal Inc., Latrobe, Pa., has announced the appointment of Carroll Edgar as a representative in the Seattle, Wash., area, with headquarters at 2727 First avenue, south. The company also has announced the appointment of John D. Cook as application engineer in the midwestern district, with headquarters at Chicago, to succeed William L. Chambers, who has been transferred to the Pittsburgh, Pa., district office.

Franklin E. Hess, manager of the Vapor Heating Corporation's office at Philadelphia, Pa., has been promoted to eastern division manager, retaining his office in Philadelphia, but with jurisdiction over the New York territory. Other changes in the firm's personnel resulting from the recent death of William H. Tucker, eastern manager, (reported in the *Railway Age* of October 16) are as follows: Anthony F. Retta, assistant manager of the New York office, appointed manager of the New York district; M. K. Loomis, transferred from the sales department at the New York office to the Philadelphia office; H. J.

Schickedanz, promoted from the service department at Chicago to the sales department at New York; R. C. Smykal, transferred from the service department at Chicago to the service department at New York; and G. R. Wallace, formerly in the service department at New York, appointed acting assistant service manager at Chicago.

Mr. Hess was first employed by the company in 1932 in its service department, later being transferred to the sales department. He was appointed manager of the St. Paul, Minn., office on December 1, 1940, and was transferred to Philadelphia on January 1, 1946.

The Pyle-National Company, Chicago, has announced the following changes of its executive personnel: A. L. Berlin, formerly assistant sales manager, appointed assistant to vice-president in charge of sales; W. A. Wulle, manager of the conduit fittings department, appointed manager of sales promotion and advertising; and F. M. Currie, sales engineer, appointed manager of industrial sales.

OBITUARY

William H. Tucker, eastern sales manager of the Vapor Heating Corporation, whose death was reported in the *Railway Age* of October 16, was born in Wilmington, Del., on June 7, 1887, and attended public school and business college in that city. He entered the employ of the Pullman Company at Wilmington on September 1, 1902, and advanced from special apprentice to mechanical inspector on May 1, 1908.



William H. Tucker

He remained with the Pullman Company, with two interruptions, one with the Hercules Powder Company and the other with the New York, New Haven & Hartford, until January 1, 1923, when he resigned from the position of Pullman general foreman at Pittsburgh, Pa., to become associated with the Vapor Heating Corporation. He was appointed eastern sales manager of that company in October, 1933.

EQUIPMENT AND SUPPLIES

FREIGHT CARS

8,934 Freight Cars Built in October

Freight cars produced last month for domestic use totaled 8,934, including 2,285 built in railroad shops, compared with September production of 9,753, which included 2,775 built in railroad shops, the American Railway Car Institute has announced. October production included, the institute said, 2,888 box cars, 3,112 hopper cars, 1,536 gondola cars, 649 refrigerator cars and 749 other cars of various types. The backlog of freight cars on order and undelivered on November 1 was 111,405, including 39,685 on order from railroad shops.

During October domestic railroads placed orders for 11,431 new freight cars, William T. Faricy, president of the Association of American Railroads, announced on November 8. Of the cars ordered last month, 9,515 are to be built in railroad shops and 1,916 will be turned out by the carbuilders, Mr. Faricy said. The A. A. R. president added that since the end of the war the railroads have installed more than 200,000 new freight cars.

The Atchison, Topeka & Santa Fe has ordered 50 mill-type gondola cars and 250 70-ton covered hopper cars from its own shops.

The Chicago, Rock Island & Pacific has ordered 1,000 70-ton gondola cars from its own shops.

The Missouri-Kansas-Texas has ordered 25 caboose cars from its own shops.

The Merchants Despatch Transportation Corporation has ordered 60 55-ton refrigerator cars from the Despatch shops.

The Northern Pacific has been authorized by its board of directors to acquire 250 50-ton drop-bottom gondolas, 250 50-ton hoppers, 250 refrigerator cars and 200 70-ton ore cars, at an estimated total cost of \$6,000,000. All, except the refrigerator cars, will probably be built at the road's Brainerd (Minn.) shops, the N. P. said.

The Western Pacific has ordered from the Greenville Steel Car Company, Greenville, Pa., 250 70-ton drop-end gondolas, of which 200 are to be 52 ft. long and 50 are to be 65 ft. long. The inquiry for the cars was reported in the *Railway Age* of October 23.

The Chicago, Milwaukee, St. Paul & Pacific has ordered 3,880 freight-train cars from its own shops. Included in the order are 2,330 gondola cars, 1,000 box cars, 500 flat cars and 50 caboose cars.

LOCOMOTIVES

The Erie has placed orders for 26 Diesel-electric switching locomotive units costing approximately \$2,525,000. Included in the order are four 660-hp. and four 1,000-hp. units to be built by the American Locomotive Company, four 750-hp. and two 1,000-hp. units to be built by the Baldwin Locomotive Works, six 1,000-hp. units to be built by the Electro-Motive Division of the General Motors Corporation and six 1,600-hp. units to be constructed by the Lima-Hamilton Corporation. Delivery of this equipment is expected to begin in the first quarter of 1949 and be completed in the second quarter of 1950.

The Northern Pacific has been authorized by its board of directors to purchase four 4,500-hp. Diesel-electric locomotives for passenger service at an estimated cost of \$2,250,000.

SIGNALING

The Delaware, Lackawanna & Western has placed an order with the Union Switch & Signal Co. for material needed for replacement of semaphore signals by color-light signals on the existing centralized traffic control installation between Bath, N. Y., and Elmira, approximately 36 mi. The order involves Style R-2 high and N-2 dwarf color-light signals, relays, rectifiers, transformers and the code equipment for two additional code controlled locations in this territory requiring four electric dual-control Style M-22B switch machines. The field work will be handled by railroad forces.

The Chesapeake & Ohio has placed an order with the Union Switch & Signal Co. for the necessary materials to provide an extension of the present electric interlocking at Carey, Ohio, involving five TC table lever units, color-light high and dwarf signals, SL-25 electric switch locks, relays, rectifiers and transformers. The field work will be handled by railway forces.

The Great Northern has ordered a 9-lever table interlocker to replace a mechanical interlocking at Boom Island, Minneapolis, Minn. This interlocker will control 12 signals and 8 switch machines at a junction point where a single-track line of the Chicago Great Western joins a double track of the Great Northern.

The Southern has ordered equipment from the General Railway Signal Company for the installation of radio communication on five locomotives at Birmingham, Ala. This system will have one fixed station and will operate on a frequency of 161.49 megacycles.

IRON & STEEL

The Western Pacific has ordered 70 track-mile of new 115-lb. rail from the

Colorado Fuel & Iron Co., Minnequa, Col. Fifty-eight miles of the rail will be laid between Sacramento, Cal., and Oroville, and the remainder will be used for curve renewals.

The Reading has ordered 25,000 tons of steel rail from the Bethlehem Steel Company for 1949 delivery.

CONSTRUCTION

Canadian National.—This road has awarded a contract to Sveinsson & Sons, Yorkton, Sask., for the erection of an express shed and office at that point. The building, 28 ft. by 72 ft., will be of frame construction on concrete piers.

Hampton & Branchville.—The Interstate Commerce Commission has further extended from November 1 to November 1, 1949, the time within which this road will be required to complete the construction of an extension to its line from Hampton, S. C., to a connection with the Seaboard Air Line at Luray and with the Southern near Lena, a total distance of approximately 12 miles. The commission's original report in the proceeding, Finance Docket No. 14957, was noted in *Railway Age* of July 6, 1946, page 28.

Louisville & Nashville.—The Interstate Commerce Commission has extended from November 15 to September 1, 1949, the time within which this road will be required to complete a 16.4-mile extension to its Rockhouse Creek branch, connecting with the latter at or near Duo, Ky. The line will serve new coal deposits (see *Railway Age* of February 8, 1947, page 341).

Missouri-Illinois.—This road recently completed construction of 2,774 ft. of yard track to improve operating conditions at Centralia, Ill., at an estimated cost of \$21,200, including the purchase of additional right-of-way.

Missouri Pacific.—This road will soon undertake three separate projects, the total estimated cost of which will be \$154,900. A grading contract has been awarded to the Ade Construction Company, Salina, Kan., for work in connection with a line and grade revision project at Waring, Kan., at a total cost of approximately \$64,300. The culvert and track work will be performed by company forces. The other two projects, to be completed by company forces, are to install signal indications from BW Siding to Council Grove, Kan., and make other signal improvements (\$51,600); and reconstruct both approaches to bridge at Ovid, Mo., as 86-ft. structures, each consisting of two 35-ft. beam spans, creosoted timber ballast deck, on concrete pile bents with 16-ft. concrete trestle at end (\$39,000).

Missouri Pacific.—This company has applied to the Interstate Commerce Commission for authority to construct a line extending approximately 7.2 miles from a point near Vulcan, Mo., to a point near Gads Hill. The line will replace a 9.5-mile segment in the same territory which the applicant seeks commission authorization to abandon.

Southern.—This road recently ordered from the Ross and White Company a sand storage tower from which the six sand boxes of a three-unit Diesel-electric road locomotive can be filled at one time.

FINANCIAL

Atchison, Topeka & Santa Fe. — Merger.—The Interstate Commerce Commission has been asked to approve a transaction under which 16 of this road's subsidiaries would be merged into two companies for management, ownership and operation purposes. The Santa Fe owns all stock, except qualifying shares of directors, of the 16 roads in addition to all of their bonded and other indebtedness.

Under the proposed plan—designed to simplify corporate structures and produce tax savings—the Clinton-Oklahoma-Western of Texas, North Plains & Santa Fe, the North Texas & Santa Fe, the Pecos River, the Pecos & Northern Texas and the South Plains & Santa Fe, all of which are operated under lease by the Panhandle & Santa Fe, would be merged into that company, while the Cane Belt, the Concho, San Saba & Llano Valley, the Ft. Worth & Rio Grande, the Gulf, Beaumont & Great Northern, the Gulf, Beaumont & Kansas City, the Healdton & Santa Fe, the Jasper & Eastern and the Texas & Gulf would be merged into their lessee, the Gulf, Colorado & Santa Fe.

At the same time, the P. & S.F. seeks commission authorization to issue 60 shares of its capital stock, having an aggregate par value of \$6,000, and the G. C. & S.F. seeks authorization to issue 80 shares of its capital stock, having an aggregate par value of \$8,000.

Baltimore & Ohio.—Acquisition.—Stockholders of this road, at the annual meeting in Baltimore, Md., on November 15, will be asked to approve the purchase by the B. & O. of the entire stock of the Centralia & Webster Springs and the merger of two B. & O. subsidiaries—the Baltimore & Ohio & Chicago and the Baltimore & Ohio Southwestern—into the parent company. The two subsidiaries have been operated under contract by the B. & O. as parts of its system for many years. The B. & O. &

C. became a B. & O. subsidiary on July 1, 1909, and the B. & O. S. has been totally owned by the B. & O. since January 1, 1916. Taking these properties into direct ownership will enable the B. & O. to simplify its capital structure. The B. & O. has purchased the entire capital stock of the C. & W. S. for \$35,000 and, under Maryland law, the transaction must be ratified by the stockholders. The territory adjacent to the 4-mi. line of this West Virginia railroad, which has not been used for several years, is underlaid with large coal deposits now being surveyed for development.

Chicago Great Western. — Operating Rights.—Division 4 of the Interstate Commerce Commission has approved a supplemental agreement under which this road will continue to use jointly the Des Moines, Ia., Union Station and adjacent passenger terminal facilities. The property, owned and operated by the Des Moines Union Railway, also is used by the Wabash and the Chicago, Milwaukee, St. Paul & Pacific. The trackage involved amounts to about 2.2 miles.

Chicago, Milwaukee, St. Paul & Pacific.—Acquisition.—This road has applied to the Interstate Commerce Commission for authority to acquire, through stock ownership, the properties of the Chicago, Terre Haute & Southeastern, which it has operated under lease since 1921, and to assume liability as guarantor in respect of the securities of that road. The applicant now owns 97.1 per cent of the lessor's stock and intends to purchase an additional 1,175.13 shares for \$10 per share, in accordance with an option contained in the lease agreement. Approval of the transaction, the Milwaukee said, will eliminate the lease, simplify its accounting, tax and other corporate procedures and will facilitate its ability to refinance outstanding bonds of the lessor in the future.

Chicago, Rock Island & Pacific.—Acquisition.—Division 4 of the Interstate Commerce Commission has authorized this road to acquire, through stock ownership, at a total net cost of not over \$5,000, control of the Warren & Ouachita Valley. The latter's capital structure consists of 1,150 shares of common stock, par value \$100 per share, all of which is outstanding.

Clinchfield.—Annual Report.—Operating revenues of this road last year totaled \$17,643,966, compared with \$13,228,934 in 1946. Operating expenses amounted to \$9,962,932, compared with \$7,804,517. Fixed charges were \$2,265,715, compared with \$2,254,504. Net income was \$4,575,319, compared with \$2,257,943. Current assets at the end of the year were \$7,277,143, compared with \$6,399,809. Current liabilities were \$7,852,961, compared with \$5,089,289. Long term debt was \$7,795,869, compared with \$6,852,989.

Great Northern.—Dividend.—This road has declared a dividend of \$2 a share on its \$6 preferred stock, payable on December 10 to stockholders of record on November 10. The previous payment on this issue was \$1.50 a share on June 21.

Maine Central.—Stock Adjustment.—The Interstate Commerce Commission has permitted Norman Stansfield, Albert Newell and G. W. Cochrane, Jr., constituting a protective committee for holders of Maine Central 5 per cent cumulative preferred stock, to intervene in the Finance Docket No. 16290 proceeding, wherein this road seeks authorization to modify its 30,000 shares of preferred stock to increase the par value thereof from \$100 to \$185 per share. The road's application was reported in *Railway Age* of October 9, page 84.

New York, Ontario & Western.—Reorganization.—Division 4 of the Interstate Commerce Commission has approved as reasonable increases in the maximum limits of annual compensation to be paid to R. L. Gebhardt and F. J. Sieghardt, as trustees of the debtor company, and E. N. Oakes, as counsel for the trustees.

Norfolk & Western.—Dividend.—This road has declared an extra dividend of \$1 a share on its common stock, payable on December 10 to stockholders of record on November 10.

St. Johnsbury & Lamoille County.—Acquisition.—Division 4 of the Interstate Commerce Commission has authorized this new company to acquire and operate that portion of the St. Johnsbury & Lake Champlain extending from Swanton, Vt., to St. Johnsbury, 96.2 miles, plus approximately 14.5 miles of passing, switching and yard tracks. The segment will be acquired for \$225,000 from the Boston & Maine, which acquired control of the line in connection with the reorganization of the St. Johnsbury & Lake Champlain Railroad Company. Directors of the reorganized company formed the Lamoille County to perpetuate "local management" and prevent possible sale of the line to outside interests "having no concern in the affairs of the company other than a profit motive." Their bid of \$225,000 was accepted after the Canadian Pacific and Canadian National rejected the B. & M.'s offer to sell the line to either of them for \$500,000. The C. P. leases the remainder of the Lake Champlain between St. Johnsbury and Lunenburg, Vt., and in turn subleases it to the Maine Central. The C. N.'s subsidiary, the Central Vermont, connects with the Lake Champlain at Swanton.

The commission has also authorized the Lamoille County to issue not exceeding \$100,000 of common stock, consisting of 1,000 shares, par value \$100 per share, and a note or notes, to be secured by a mortgage, for not ex-

ceeding \$225,000. Both stock and notes will be sold at par, with proceeds of the notes to be applied toward purchase of the properties involved and proceeds of the stock to be used for organization expenses and working capital. The notes will be dated as of a date to be determined between the Lamoille County and the Montpelier, Vt., National Bank and will bear interest at 4½ per cent annually. They will mature in amounts equal to 1 per cent of the face amounts thereof on each interest-payment date from June 30, 1949, to December 31, 1954, inclusive; 3¼ per cent thereof on interest-payment dates from June 30, 1955, to December 31, 1967; and 3½ per cent on June 30, 1968.

Southern.—Dividend.—This road has declared a quarterly dividend of \$1 a share on its common stock, payable on December 15 to stockholders of record on November 15. The previous quarterly payment on this issue was 75 cents a share on September 15.

Southern Pacific.—Operating Agreement.—This road's subsidiary, the San Diego & Arizona Eastern, has asked the Interstate Commerce Commission to approve a supplemental agreement under which it will continue to use certain facilities of the Atchison, Topeka & Santa Fe in San Diego, Calif., including the passenger station in that city. Under the agreement, the applicant's rental will be increased from \$1,000 monthly to \$2,000 monthly, effective January 1, 1947. The agreement also provides that the S. D. & A. E. will make retroactive rental payments of \$3,000 monthly from March, 1945, through August, 1946, and \$2,500 monthly from September 1, 1946, through December, 1946.

New Securities

Application has been filed with the Interstate Commerce Commission by:

Pennsylvania.—To assume liability for \$7,935,000 of series V equipment trust certificates, proceeds of which would be applied toward purchase of 22 1,500-hp. Diesel-electric freight locomotives, including 12 "A" units and 10 "B" units; 47 1,000-hp. Diesel-electric switching locomotives; 44 660-hp. Diesel-electric switching locomotives; 10 380-hp. Diesel-electric switching locomotives, and 49 passenger cars. The applicant told the commission that bids have been accepted only on the following equipment:

Description and Builder	Estimated Unit Cost
2 1,500-hp. "A" unit Diesel-electric freight locomotives (Electro-Motive Division, General Motors Corporation)	\$190,000
10 1,000-hp. Diesel-electric switching locomotives (American Locomotive Company)	106,000
5 1,000-hp. Diesel-electric switching locomotives (American)	105,500
1 1,000-hp. Diesel-electric switching locomotive (American)	130,000
5 660-hp. Diesel-electric switching locomotives (American)	83,000
7 1,000-hp. Diesel-electric switching locomotives (Baldwin Locomotive Works)	106,000
2 1,000-hp. Diesel-electric switching locomotives (Baldwin)	124,000

14 660-hp. Diesel-electric switching locomotives (Baldwin)	83,000
8 1,000-hp. Diesel-electric switching locomotives (Fairbanks, Morse & Co.)	105,500
14 type 21 single bedroom stainless-steel sleeping cars (The Budd Company)	148,000
3 type 10 single bedroom, 6 double bedroom steel sleeping cars (Pullman-Standard Car Manufacturing Company)	127,000
11 type 12 duplex room, 4 double bedroom steel sleeping cars (Pullman-Standard)	143,000
11 type 6 double bedroom, buffet-lounge steel sleeping cars (Pullman-Standard)	128,000
7 type 1 drawing room, 3 double bedroom, bar-lounge steel sleeping cars (Pullman-Standard)	132,000
3 type 2 drawing room, 1 compartment, 1 double bedroom, buffet-lounge-observation steel sleeping cars (Pullman-Standard)	134,000

The applicant advised the commission that it has invited bids on the remainder of the equipment to be purchased. The certificates, to be sold on the basis of competitive bidding, would be dated November 1, and would mature in 15 annual installments of \$529,000.

Division 4 of the I.C.C. has authorized:

Missouri-Kansas-Texas.—To issue a promissory note for not exceeding \$1,850,000, as evidence of a loan of a like amount from the Republic National Bank of Dallas, Tex. Proceeds from the loan will be applied toward payment of deferred installments of federal income and excess profits taxes amounting to \$1,877,519. As collateral security for the note, which will bear interest at the rate of 3½ per cent, the commission has authorized the M.-K.-T. to pledge and repledge not exceeding \$10,000,000 of its prior-lien mortgage 4 per cent series F gold bonds in an amount equal as nearly as may be to but not less than 150 per cent of the amount of the loan, with the ratio of collateral to be not less than 125 per cent in market value of bonds to the amount of the loan outstanding.

St. Louis-San Francisco.—To assume liability for \$4,260,000 of series C equipment trust certificates, proceeds of which will be applied toward purchase of equipment estimated to cost \$5,685,220, as described in *Railway Age* of October 23, page 62. The certificates will be dated November 1 and will mature in 15 annual installments of \$284,000, starting November 1, 1949. The report also approves a selling price of 99.2655 with a 2½ per cent interest rate, the bid of Harris, Hall & Co., and associates, on which basis the average annual cost will be approximately 2.61 per cent. The certificates were reoffered to the public at prices yielding from 1.6 per cent to 2.75 per cent, according to maturity.

Average Prices Stocks and Bonds

	Nov. 9	Last week	Last year
Average price of 20 representative railway stocks	44.18	50.33	46.71
Average price of 20 representative railway bonds	87.65	88.51	86.08

Dividends Declared

Chesapeake & Ohio.—Common, 75c, quarterly, payable January 3, 1949, to holders of record December 7; 3½% convertible preferred, 87½c, quarterly, payable February 1, 1949, to holders of record January 7, 1949.

North Pennsylvania.—\$1.00, quarterly, payable November 25 to holders of record November 18.

Pittsburgh, Youngstown & Ashtabula.—7% preferred, \$1.75, quarterly, payable December 1 to holders of record November 20.

RAILWAY OFFICERS

EXECUTIVE

Whitworth M. Smith, whose appointment as vice-president of the Eastern departments of the Railway Express Agency at New York was reported in the *Railway Age* of September 25, began his career as a clerk for the Southern Express Company at Murfreesboro, Tenn., later becoming agent at Humboldt, Tenn., and Evansville, Ind. Mr. Smith then served as general agent at Nashville, Tenn., for two years before going to Atlanta, Ga., as traveling traffic agent. After spending two years as general agent at Miami, Fla., he became operating superintendent at Jacksonville, Fla., subsequently trans-



Whitworth M. Smith

ferring to the Georgia division at Atlanta. Mr. Smith then became superintendent of organization, Southern territory, on the vice-president's staff, and was later assigned to the president's staff at New York as chairman of the Standard Practices Committee. In January, 1939, he was appointed executive assistant to the president and in August, 1940, became general manager of the Texas department at Houston, Tex. Mr. Smith became vice-president and general manager of the Mississippi Valley department at St. Louis, Mo., on January 1, 1948, which position he held until his recent appointment.

T. A. Thompson, whose appointment as assistant to president of the Denver & Rio Grande Western at Denver, Colo., was reported in the *Railway Age* of September 11, was born on October 19, 1891, at La Crosse, Wis. He attended Wisconsin Business University at La Crosse and entered railroad service in

1910 in the office of superintendent, Chicago, Burlington & Quincy, at La Crosse. He served as stenographer and clerk until the following year, when he joined the Northern Pacific at Pasco,



T. A. Thompson

Wash. For a brief period during 1917, Mr. Thompson was employed by the St. Louis Southwestern at Tyler, Tex., and in October of that year he entered Rio Grande employ, serving as statistician and chief clerk until 1921. He was chief clerk in the executive department from 1921 to 1937 and general auditor from 1937 to 1946. In the latter year he was appointed assistant comptroller, which post he held at the time of his recent appointment.

Dennis J. Maley, whose retirement as assistant vice-president of the Erie at Cleveland, Ohio, was reported in the *Railway Age* of October 2, was born at Great Valley, N. Y., on April 23, 1885, and entered railroad service on May 8,



Dennis J. Maley

1905, as shop timekeeper for the Erie at Salamanca, N. Y., where he remained until June 1, 1916. Mr. Maley then became chief clerk to superintendent at Salamanca, returning to this position after military service during World War I. He was appointed trainmaster at Meadville, Pa., on September 16,

1929, and promoted to assistant superintendent at Youngstown, Ohio, on December 1, 1932. Mr. Maley became superintendent on June 16, 1933, in which capacity he served successively on the Kent, Buffalo and Rochester, and New York Terminal divisions. He was appointed assistant general manager of the Eastern district at Jersey City, N. J., on November 1, 1939, subsequently transferring to the Western district at Youngstown. On July 16, 1941, he was promoted to general manager of the Western district at Youngstown and on March 17, 1942, became assistant vice-president at Cleveland, where he remained until his retirement.

Charles L. Patterson, general manager of the Lehigh Valley, with headquarters at New York, has been elected vice-president and general manager. Mr. Patterson is a native of Pittsburgh, Pa., and attended Lawrenceville School, Lawrenceville, N. J., and Princeton University. He entered the service of the Lehigh Valley at Bethlehem, Pa., in 1943 as supervisor terminal operations. Prior to this he held various



Charles L. Patterson

positions in the operating and mechanical departments of the Pennsylvania, dating from 1923, at Philadelphia, Pa., Pittsburgh and other points, and was assistant trainmaster on the Long Island. Mr. Patterson was superintendent of the New York division of the Lehigh Valley at Jersey City, N. J., from June, 1944, until May, 1947, when he was promoted to general manager at New York.

J. D. Dodson, general counsel for the Texas-Mexican, with headquarters at San Antonio, Tex., has been elected president and general counsel, succeeding **D. L. Keiser**, who has resigned.

J. D. Eastham has been appointed assistant to vice-president of the Chicago & Illinois Midland, with headquarters at Springfield, Ill.

W. N. Deramus, III, assistant to general manager of the Kansas City Southern at Kansas City, Mo., has been ap-

pointed assistant to the president, Chicago Great Western, with headquarters at Chicago.

William J. Egan has resigned as president of the Hudson & Manhattan at New York.

FINANCIAL LEGAL and ACCOUNTING

Jerome C. Sladek, whose retirement as auditor of passenger receipts of the Great Northern at St. Paul, Minn., was reported in the *Railway Age* of October 2, was born in St. Paul on March 13, 1882. He attended the University of Minnesota, and in 1896 he entered service with the G.N. Mr. Sladek became chief division clerk in 1902 and chief clerk in 1918. He served in the latter post until 1945, at which time he was further advanced to auditor of passenger receipts.

Robert Frederickson has been appointed chief research accountant of the Jersey Central Lines at Jersey City, N. J., to head the newly-established research division of the accounting department. The new division will undertake special railroad studies and handle some of the tax work formerly performed by the railroad's property department.

Herman A. Nelson, assistant to assistant general auditor of the Southern Pacific, has been advanced to assistant to general auditor at San Francisco, Cal. He succeeds **Jay C. Jaspas**, whose appointment as executive assistant was reported in the *Railway Age* of October 30. Mr. Nelson is succeeded by **A. L. West**.

OPERATING

Lucian C. Armfield, whose retirement as commissary officer for the Pullman Company at Chicago, was reported in the *Railway Age* of October 2, is a native of Greensboro, N. C., and started his Pullman career as a conductor in San Antonio, Tex., in 1907. He was appointed district commissary officer at the latter point in 1911, advancing to commissary inspector in 1916. Mr. Armfield has served as Pullman commissary officer since 1926.

John Darwin Warfield, whose appointment as superintendent of the Baltimore Terminal division of the Baltimore & Ohio at Baltimore, Md., was reported in the *Railway Age* of October 2, was born on April 23, 1901, at Mannington, W. Va. Mr. Warfield entered railroad service on June 1, 1916, as yard clerk with the Baltimore & Ohio at Folsom, W. Va., subsequently serving as brakeman, yard clerk, yard brakeman and yard clerk at Folsom, transferring in the latter capacity to New Martinsville, W. Va., in August, 1920. He then served as yardmaster, general yardmaster, brakeman, train rider, brakeman, night yardmaster and assistant

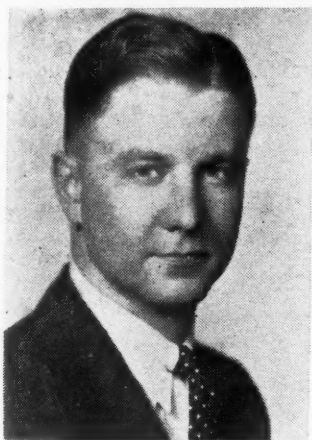
general yardmaster at New Martinsville. Mr. Warfield became yardmaster at Brooklyn Junction, W. Va., in May, 1925, transferring to Martinsville in April, 1928, and to Parkersburg, W. Va., in June, 1928. After serving as general yardmaster at various points,



J. D. Warfield

he was appointed assistant trainmaster at Baltimore on September 1, 1936, becoming trainmaster at Pittsburgh, Pa., on October 1, 1941, and terminal superintendent at Philadelphia, Pa., on October 1, 1942. Mr. Warfield was promoted to assistant superintendent of the Baltimore division on June 1, 1944.

Downing B. Jenks, whose appointment as general manager of the Chicago & Eastern Illinois at Chicago, was reported in the *Railway Age* of September 18, was born on August 16, 1915, at Portland, Ore., and was graduated by Yale University in 1937. In July of the latter year, he entered railroad service on the New York division of the Pennsylvania. He served in the army during



Downing B. Jenks

World War II from 1942 to 1945, being discharged as a lieutenant-colonel. During this period he was superintendent of car service and assistant general superintendent of the Military Railway service in North Africa, Italy, France and Germany. Immediately prior to his

recent association with the C.&E.I., Mr. Jenks was superintendent of the Great Northern's Spokane division at Spokane, Wash.

W. P. Wilson, whose promotion to general superintendent of the Chicago, Burlington & Quincy at Lincoln, Neb., was reported in the *Railway Age* of September 25, was born on November 30, 1894, at Robinson, Ill. Mr. Wilson began his railroad career in 1911 as a telegrapher with the Cleveland, Cincinnati, Chicago & St. Louis, subsequently serving in that position with the Southern and the Denver & Rio Grande Western. Between 1916 and 1930 he served with the Colorado & Southern (part of the Burlington Lines) as telegrapher, dispatcher, chief dispatcher and train rules examiner. He was appointed assistant to general manager of the C. B. & Q. in 1930, and in the following year was appointed trainmaster. Mr. Wilson served as assistant superintendent on the Burlington from 1932 to 1936, when he was appointed superintendent of terminals at St. Louis, Mo. He held the latter position until 1941 when he went to Denver, Colo., as division superintendent.



W. P. Wilson

ent of the C. & S. Mr. Wilson served during World War II as an officer with the Military Railway Service, during which time he was general superintendent of terminals at St. Paul, Minn.; commanding officer of the 770th Railway Operating Battalion in Alaska; commanding officer of the 745th R. O. B. at Fort Wayne, Ind., and of Camp Thomas A. Scott; commanding officer of the 745th R. O. B. in India; and colonel and commanding officer at the 774th Railway Grand Division and deputy director of the Italian State Railway System, commanding all U. S. Army M. R. S. troops in the Mediterranean theater of operations. Following his army service, Mr. Wilson returned to the C. & S. in 1945 as division superintendent at Denver, and in November, 1947, went to McCook, Neb., as superintendent of the C. B. & Q. He was located at the latter point at the time of his recent appointment.

Raymond W. Dow, chief clerk to the general manager of the Bangor & Aroostook, has been appointed assistant to general manager at Bangor, Me. **Lester E. Terrio**, superintendent of car service, has been appointed superintendent of transportation at Bangor.

Henry F. Martin has been appointed superintendent of mine service of the Atlantic Coast Line at Mulberry, Fla. Mr. Martin has been acting superintendent of mine service since September 21.

Ransom B. Hare, superintendent of the Columbia district of the Atlantic Coast Line at Florence, S. C., has retired after 59 years of continuous service with the Atlantic Coast Line and its predecessor companies. Mr. Hare was born in Johnston county, N. C., on June 5, 1874, and entered railroad service as a telegrapher at St. Stephen, S. C., on October 29, 1889, serving successively as telegrapher and dispatcher at various points in South Carolina and also at Wilmington, N. C., until 1902, when he was appointed chief dispatcher at Florence. His subsequent service, all on the Columbia district at Florence, included the positions of trainmaster, assistant superintendent and superintendent; he held the latter position from May 1, 1918, until his retirement on October 31. Mr. Hare has been president of the Atlantic Coast Line's Y. M. C. A. at Florence since its organization in 1912.

Harry A. Carter, assistant trainmaster of the Monongahela Connecting at Pittsburgh, Pa., has retired after approximately 40 years of service.

L. B. Shirley has been appointed trainmaster of the International-Great Northern's Houston (Tex.) terminal, succeeding **N. L. Morris** who has been assigned to other duties.

TRAFFIC

The New York Central has announced the following appointments in its traffic department: **C. M. Indra**, general agent, freight department, Minneapolis, Minn.; **J. R. Teasdale**, district freight agent, St. Paul, Minn.; **George A. Childers**, coal freight agent, Cincinnati, Ohio; and **T. J. Corridan**, assistant coal freight agent, Cincinnati. **W. A. Hillman**, export and import agent of the N.Y.C. at Chicago, has been appointed general agent of the Chicago Junction, Chicago River & Indiana, and the Indiana Harbor Belt, with headquarters at Chicago.

Otis P. Jones, general agent of the Savannah & Atlanta at Atlanta, Ga., has been transferred to Jacksonville, Fla., succeeding **Herman R. Morgan**, who has retired because of ill health, after 27 years of service with this company. **William B. Redding** has been appointed

general agent at Tampa, Fla. The position of commercial agent at Tampa has been abolished. **J. Kelly**, commercial agent at Atlanta, has been appointed general agent there, succeeding Mr. Jones.

C. C. Martin has been appointed division freight agent of the Norfolk Southern at Charlotte, N. C., succeeding **J. K. Powell**, retired.

Richard B. Baldwin has been appointed assistant to the passenger traffic manager of the Bangor & Aroostook at Bangor, Me.

F. Emmett Hanlon, chief rate clerk of the Atchison, Topeka & Santa Fe's passenger department in Los Angeles, Cal., has been appointed assistant general passenger agent at Topeka, Kan., succeeding **Hugh N. Davis**, whose appointment as passenger traffic manager at Topeka was reported in the *Railway Age* of November 6.

MECHANICAL

E. J. Cox, car foreman of the Canadian National at Port Mann, B. C., has been appointed general car foreman of the British Columbia district at Vancouver, B. C., succeeding **F. C. Fraser**, transferred.

D. R. Rodgers, assistant to chief mechanical officer of the Missouri Pacific at St. Louis, Mo., has retired. He is succeeded by **L. J. Verburg**, electrical engineer, whose biographical sketch appeared in the *Railway Age* of July 24, in connection with his appointment as electrical engineer.

J. R. Hamilton has been appointed superintendent of shop (locomotive department) of the New York Central at Beech Grove, Ind.

E. H. Holloway, supervisor of Diesel maintenance of the Central of Georgia, has been promoted to the newly-created position of superintendent Diesel maintenance at Macon, Ga. Mr. Holloway is a native of Macon, where he first entered the employ of the Central of Georgia in 1922 as assistant draftsman. He subsequently served as draftsman, mechanical assistant, and supervisor of Diesel maintenance, holding the latter position from April, 1942, until his recent promotion.

H. G. Smith has been appointed superintendent of motive power, International-Great Northern (part of the Missouri Pacific Lines), with headquarters at Palestine, Tex. He succeeds **S. P. Byrnes**, who has been appointed master mechanic of the Missouri Pacific Lines at San Antonio, Tex. **E. M. Vandiver** has been appointed acting master mechanic of the M. P.'s Arkansas division at North Little Rock, Ark., succeeding **George Schepp**, who has been granted a sick leave.

ENGINEERING and SIGNALING

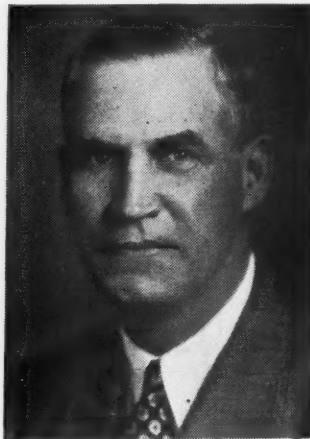
Cedric A. Roberts, whose appointment as engineer of structures of the Erie at Cleveland, Ohio, was reported in the *Railway Age* of October 16, was born in Norwood, Mass., and attended schools there and in Brooklyn, N. Y.



Cedric A. Roberts

Mr. Roberts was graduated with a degree in civil engineering from Massachusetts Institute of Technology, and joined the Erie as a junior draftsman on July 7, 1930. He was promoted to draftsman in 1933, to designer in 1943, and to resident engineer in 1945.

Arthur B. Hillman, whose appointment as assistant chief engineer of the Chicago & Western Indiana and the Belt of Chicago, with headquarters at Chicago, was reported in the *Railway Age* of October 2, was born on September

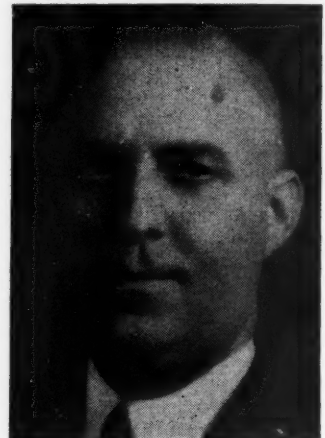


Arthur B. Hillman

24, 1889, at Chicago. He was graduated by the University of Illinois in 1914, some five years after entering railway service with the Lake Shore & Michigan Southern (now part of the New York Central). He subsequently served as chainman and rodman with the latter road, and in 1910 joined the C. & W.I. as a rodman. He advanced

through successive positions as levelman and transitman, and in 1916 was appointed assistant engineer, maintenance, with the Belt of Chicago. Following army service as an officer in World War I, Mr. Hillman returned in 1919 as assistant engineer of the Belt, serving later as roadmaster, assistant trainmaster and assistant engineer, maintenance. In 1930 he was appointed roadmaster with jurisdiction over the bridge and building department and in 1937 he became assistant engineer in charge of reconstruction of Clearing yard. Mr. Hillman was further advanced in 1940 to engineer, maintenance of way, of both the Belt of Chicago and the C. & W.I., which position he held at the time of his recent promotion.

Spencer Danby, whose appointment as valuation engineer of the Pennsylvania at Philadelphia, Pa., was reported in the *Railway Age* of October 9, was born at Easton, Pa., in 1893, and was graduated from Lafayette College in civil engineering. Mr. Danby entered the service of the Pennsylvania in 1915



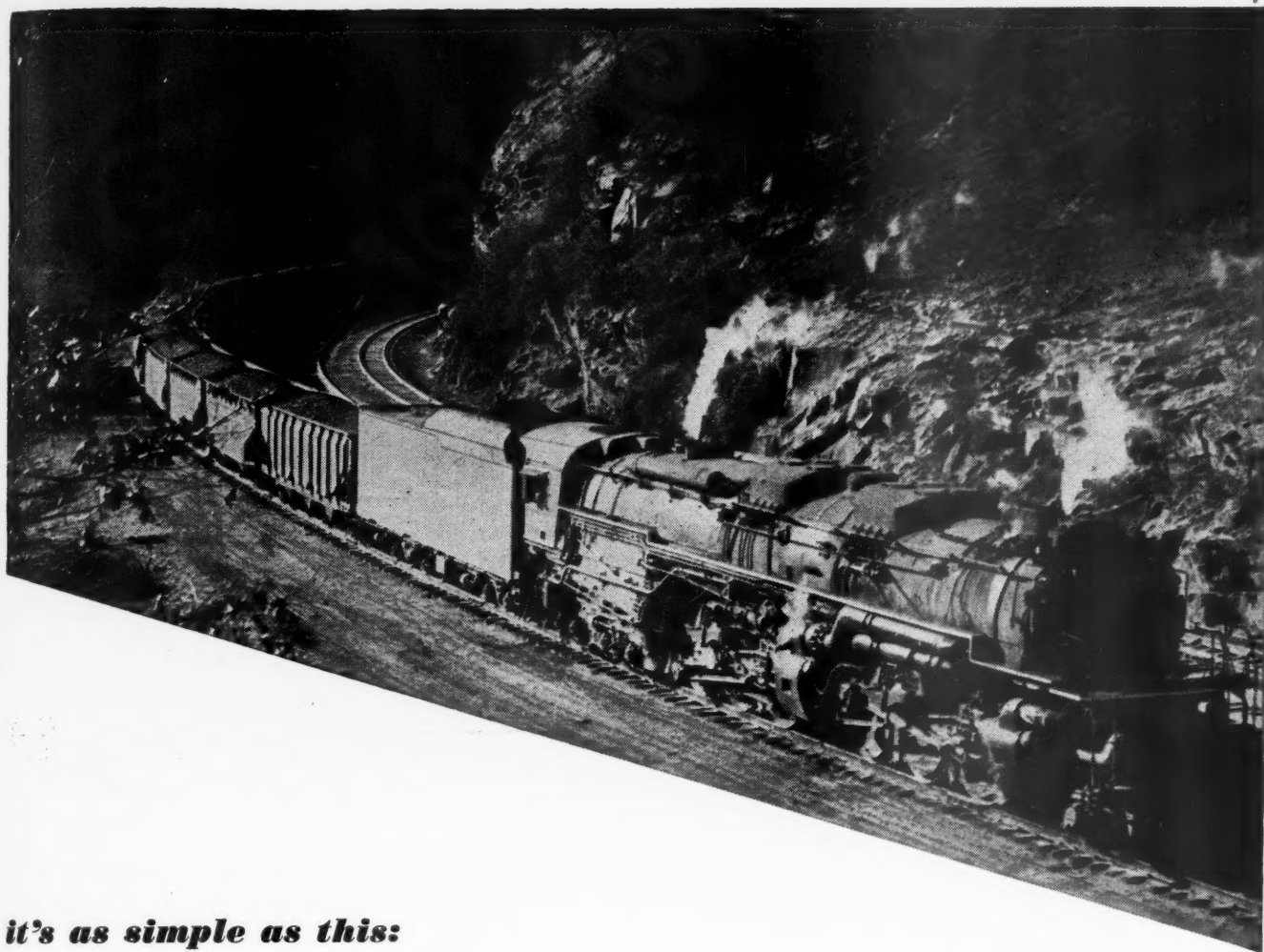
Spencer Danby

as a draftsman and served in various engineering capacities, including supervisor, assistant division engineer and division engineer before being appointed assistant valuation engineer in November, 1941. He held the latter position at the time of his recent promotion to valuation engineer.

J. B. Styles has been appointed assistant to engineer of statistics of the Atlantic Coast Line at Wilmington N. C.

David L. Smith, assistant engineer of the Atlantic Coast Line, has been appointed assistant real estate agent at Wilmington, N. C., and **John A. Gresham**, senior assistant engineer at Wilmington, has been appointed assistant real estate engineer.

John P. Datesman, whose appointment as engineer of track of the Chicago & North Western at Chicago, was reported in the *Railway Age* of September 25, was born on November 22,



it's as simple as this:

MORE *with* **FEWER**

Last year, while some 2000 steam locomotives were being retired, the revenue ton-miles moved by steam reached 570 billion.

Here are two apparently opposing facts: The number of steam locomotives on Class I railroads hit a 30-year low. The number of ton-miles moved by these locomotives, on these roads, hit a peace-time high. Obviously the remaining locomotives averaged more time on the road. And, also obviously, the modern portion of that power—both new and rebuilt—raised that average.

It's as simple as that.

We built a substantial number of the modern locomotives that helped set that record. They have proved their ability, with planned scheduling, to stay on the road for 16 and 18 hours at a stretch—and to be ready for reassignment, with planned servicing facilities, in an hour or two. We are continuing to build such locomotives—progressively better, more reliable, and with even greater capacity for work.



DIVISIONS: Lima, Ohio — Lima Locomotive Works Division; Lima Shovel and Crane Division. Hamilton, Ohio — Hooven, Owens, Rentschler Co.; Niles Tool Works Co.

PRINCIPAL PRODUCTS: Locomotives; Cranes and shovels; Niles heavy machine tools; Hamilton diesel and steam engines; Hamilton heavy metal stamping presses; Hamilton-Kruse automatic can-making machinery; Special heavy machinery; Heavy iron castings; Weldments.

1897, at Douglas, Wyo. Mr. Datesman attended Iowa State College, and in 1919 he entered railroad service as a tapeman with the North Western at Sioux City, Iowa. He later served as rodman at Eagle Grove, Iowa, and as instrumentman on construction of Proviso yard. He was appointed assistant engineer at Proviso in 1926, and worked in that capacity until the yard was completed in 1930. At that time he was transferred to Kenosha, Wis., as assistant engineer on track elevation work, and in 1932 became assistant roadmaster on the Wisconsin division at Chicago. He was advanced to roadmaster at Council Bluffs, Iowa, in 1934, where he was located until his appointment in 1944 as drainage engineer, with headquarters at Chicago. He was appointed division engineer at Huron, S. D., on January 1, 1947, being transferred to Green Bay, Wis., on July 1 of that year and to Chicago on July 1, 1948. He was serving at the latter point at the time of his new appointment.

R. W. Mabe, whose promotion to assistant chief engineer of the Nashville, Chattanooga & St. Louis at Nashville, Tenn., was reported in the *Railway Age* of September 25, was born on February 1, 1902, at Corryton, Tenn. He attended public schools at the latter



R. W. Mabe

point and received his higher education at the University of Tennessee, where he majored in civil engineering. Mr. Mabe was structural engineer for the city of Knoxville, Tenn., from 1924 to 1930, after which he served for three years in a similar capacity with the Cincinnati Union Terminal. From 1933 to 1943 he served as senior structural engineer in charge of railroad bridges for the Tennessee Valley Authority. Mr. Mabe joined the N.C. & St.L. on April 15, 1943, as bridge engineer, and was promoted to senior assistant engineer on December 16, 1947. He was serving in the latter position at the time of his recent advancement.

T. C. Aker, whose appointment as chief engineer of the Nashville, Chattanooga

& St. Louis at Nashville, Tenn., was reported in the *Railway Age* of September 25, was born on March 9, 1889, at Delaware City, Del. He attended the University of Delaware and entered railroad service in 1910 with the Louisville & Nashville. Mr. Aker served until October 1, 1915, in the engineering department in various capacities on construction work in Kentucky, Tennessee and Alabama. He was next appointed resident engineer for the N.C.&St.L., on construction of various grade revision projects. Following military service during World War I, he returned to the N. C. & St. L., as assistant engineer, valuation and real estate department. During the years 1923 to 1927, he was employed in the maintenance of way and bridge departments, and in the latter year he became assistant engineer in the office of chief engineer. Mr. Aker had served since 1939 as assistant chief engineer, the post he held at the time of his recent advancement.

L. D. Shelkey, whose appointment as office assistant to chief engineer of the Bessemer & Lake Erie at Greenville, Pa., was reported in the *Railway Age* of October 9, received his B.S.C.E. degree from the University of Pittsburgh in 1933 and entered railroad service with the Pennsylvania as an assistant in the engineering department in 1934. Mr. Shelkey held various positions with the P.R.R., including assistant supervisor track and draftsman, until Decem-



L. D. Shelkey

ber, 1940, when he went to the Carnegie-Illinois Steel Corporation as a transitman at the Ohio Works at Youngstown, Ohio. On May 7, 1941, he entered the service of the Bessemer & Lake Erie as assistant supervisor track and was advanced to supervisor track on February 1, 1943, holding the latter position at the time of his recent appointment as office assistant to chief engineer.

H. F. Whitmore, whose appointment as chief engineer of the New York, Chicago & St. Louis at Cleveland, Ohio, was reported in the *Railway Age* of No-

vember 6, was born on May 25, 1890, at Red House, N. Y. He attended Ohio Northern University for three years before joining the Nickel Plate as a rodman at Cleveland in 1916. Following service with the 25th Engineers Corps



H. F. Whitmore

in World War I, he resumed his education at Edinburgh University, Scotland. Mr. Whitmore later returned to the Nickel Plate as a rodman at Conneaut, Ohio, and was assigned to various engineering posts at Indianapolis, Ind., and Frankfort. He was advanced to assistant to the chief engineer at Cleveland on May 1, 1945, which position he held until his recent appointment.

SPECIAL

F. T. Brandt, Jr., has been appointed manager of personnel, Elgin, Joliet & Eastern, with headquarters at Chicago.

OBITUARY

H. R. Geib, assistant to the chief engineer maintenance of way of the New York zone of the Pennsylvania, with headquarters at New York, died on November 4 at the Elizabeth General hospital, Elizabeth, N. J., following a brief illness.

Henry A. Parish, who retired in December, 1947, as superintendent of the Chicago & North Western's Wisconsin division, died on November 2 at his home in Chicago, at the age of 67.

Malcolm H. McEwen, assistant to vice-president—traffic of the Chicago, Milwaukee, St. Paul & Pacific at Seattle, Wash., died in that city on November 4. Until recently, Mr. McEwen was western traffic manager at Seattle.

F. E. Lacey, master mechanic of the Missouri Pacific Lines at San Antonio, Tex., died recently.

Alexander F. Banks, retired president of the Elgin, Joliet & Eastern, died at his home in Altadena, Cal., on November 7, at the age of 88.

There's no revenue from the coal a railroad hauls to run its own locomotives, and operating efficiency demands that every possible pound of steam be secured from such coal.

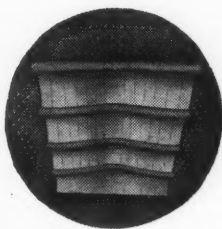
A first step toward getting maximum value from each ton of fuel is the maintenance of a 100% brick arch in the firebox of every locomotive.

For this purpose the power-increasing, fuel-saving advantages of Security Sectional Arches have been proved by years of service in all types of locomotive fireboxes.

TO HOLD DOWN *"DEADHEAD"* COAL



**HARBISON-WALKER
REFRACTORIES CO.**
Refractories Specialists



AMERICAN ARCH CO. INC.
60 East 42nd Street, New York 17, N. Y.
Locomotive Combustion Specialists

INTERSTATE COMMERCE COMMISSION
BUREAU OF TRANSPORT ECONOMICS AND STATISTICS
OPERATING REVENUES AND OPERATING EXPENSES OF CLASS I STEAM
RAILWAYS IN THE UNITED STATES

Compiled from 127 monthly reports of revenues and expenses representing 131 Class I steam railways*
(Switching and Terminal Companies Not Included)

FOR THE MONTH OF JULY 1948 AND 1947

Item	United States		Eastern District		Southern District		Western District	
	1948	1947	1948	1947	1948	1947	1948	1947
Miles of road operated at close of month.....	226,915	227,421	53,492	53,733	46,129	46,158	127,294	127,530
Revenues:								
Freight.....	\$685,425,942	\$558,190,620	\$252,456,919	\$206,835,600	\$133,755,828	\$103,437,832	\$299,213,195	\$247,917,188
Passenger.....	95,094,025	93,642,306	48,770,995	47,595,295	13,984,026	14,406,455	32,339,004	31,640,553
Mail.....	15,573,796	11,219,474	5,774,370	4,303,842	2,782,263	1,958,121	7,017,163	4,957,511
Express.....	7,992,001	8,218,210	2,331,869	1,995,527	1,275,460	1,019,073	4,384,672	5,203,610
All other operating revenues.....	37,907,781	34,725,900	16,259,586	15,105,567	6,110,749	5,526,510	15,537,446	14,093,733
Railway operating revenues.....	841,993,545	705,996,510	525,593,739	275,835,921	157,908,326	126,347,994	358,491,480	303,812,595
Expenses:								
Maintenance of way and structures.....	120,462,120	106,513,930	45,666,516	39,776,379	24,219,156	21,968,907	50,576,448	44,768,644
Depreciation.....	10,394,376	10,134,872	4,413,542	4,333,964	1,808,419	1,742,790	4,172,415	4,058,118
Retirements.....	1,128,352	1,145,199	367,115	221,335	131,957	373,122	629,280	550,742
Deferred maintenance.....	*240,396	*737,053	*3,593	*14,468	*15,800	*28,146	*185,003	*694,439
Amortization of defense projects.....	146,587	108,018	16,414	12,734	43,904	30,391	86,269	64,893
Equalization.....	*1,581,210	*2,892,376	*1,616,213	*1,747,836	157,585	*947,740	*122,582	*196,800
All other.....	110,614,411	98,755,270	42,489,251	36,970,650	22,129,091	20,798,490	45,996,069	40,986,130
Maintenance of equipment.....	139,223,284	126,063,658	58,186,001	52,616,984	28,333,794	25,121,176	52,703,489	48,325,498
Depreciation.....	20,826,818	19,324,155	8,131,126	7,657,820	4,654,691	4,304,004	8,041,001	7,362,331
Retirements.....	*56,703	*47,113	*13,394	*7,141	*15,794	*4,785	*27,515	*35,187
Deferred maintenance and major repairs.....	191,403	*343,601	*1,000	20	*46,968	*74,335	*143,435	*269,286
Amortization of defense projects.....	1,227,166	1,238,578	452,391	458,154	238,924	248,611	535,851	531,813
Equalization.....	*499,445	*376,663	47,213	57,839	*569,161	*402,411	22,503	*32,091
All other.....	117,916,851	106,268,302	49,569,665	44,450,292	24,072,102	21,050,092	44,275,084	40,767,918
Traffic.....	16,061,969	14,636,721	5,682,556	5,147,698	3,403,114	3,057,904	6,976,299	6,431,119
Transportation—Rail line.....	316,164,574	277,362,073	132,193,895	117,982,355	57,215,118	49,031,881	126,755,561	110,347,837
Miscellaneous operations.....	11,935,775	11,273,982	4,476,674	4,134,910	1,584,844	1,476,682	5,874,257	5,662,390
General.....	22,311,324	19,852,748	8,482,811	7,705,930	4,864,414	4,327,169	8,964,099	7,819,649
Railway operating expenses.....	626,159,046	555,703,112	254,688,453	227,364,256	119,620,440	104,983,719	251,850,153	223,355,137
Net revenue from railway operations.....	215,834,499	150,293,398	70,905,286	48,471,665	38,287,886	21,364,275	106,641,327	80,457,458
Railway tax accruals.....	96,398,698	74,978,264	31,001,042	23,846,837	19,223,895	13,521,940	46,173,761	37,609,487
Pay-roll taxes.....	21,147,396	29,419,892	8,964,939	12,240,914	3,350,236	5,555,392	8,832,221	11,623,518
Federal income taxes.....	48,854,375	21,322,717	11,801,983	2,612,568	10,484,956	3,268,351	26,567,331	15,441,816
All other taxes.....	26,396,927	24,235,655	10,234,120	8,993,355	5,388,703	4,698,217	10,774,104	10,544,083
Railway operating income.....	119,435,801	75,315,134	39,904,244	24,624,828	19,063,991	7,842,335	60,467,566	42,847,971
Equipment rents—Dr. balance.....	11,398,451	10,767,564	4,491,716	4,172,261	*1,979,584	*957,584	8,886,319	7,552,887
Joint facility rent—Dr. balance.....	2,780,542	3,349,742	1,339,960	1,631,488	317,944	519,507	1,122,638	1,198,747
Net railway operating income.....	105,256,808	61,197,828	34,072,568	18,821,079	20,725,631	8,280,412	50,458,909	34,096,337
Ratio of expenses to revenues (percent)	74.4	78.7	78.2	82.4	75.8	83.1	70.3	73.5

FOR THE SEVEN MONTHS ENDED WITH JULY 1948 AND 1947

Item	United States		Eastern District		Southern District		Western District	
	1948	1947	1948	1947	1948	1947	1948	1947
Miles of road operated at close of month.....	227,150	227,504	53,665	53,732	46,148	46,197	127,337	127,575
Revenues:								
Freight.....	\$4,490,224,654	\$3,934,368,023	\$1,719,903,761	\$1,506,402,746	\$936,384,926	\$832,131,989	\$1,833,935,967	\$1,595,833,288
Passenger.....	547,981,943	550,827,043	278,103,469	274,728,944	88,354,306	91,803,019	181,524,168	184,295,080
Mail.....	106,985,017	79,100,085	38,151,418	29,572,599	19,544,406	14,251,973	49,289,193	35,275,513
Express.....	67,527,734	69,179,704	22,606,774	21,438,249	11,979,171	12,904,279	32,941,789	34,837,176
All other operating revenues.....	235,993,454	225,102,988	104,516,251	99,952,052	39,771,943	38,485,573	91,705,260	86,665,363
Railway operating revenues.....	5,448,712,802	4,858,577,843	2,163,281,673	1,932,094,590	1,096,034,752	989,576,833	2,189,396,377	1,936,906,420
Expenses:								
Maintenance of way and structures.....	765,168,896	675,754,913	281,536,084	243,364,207	161,014,891	149,312,320	322,617,921	283,078,386
Depreciation.....	72,376,166	70,880,773	30,746,442	30,323,956	12,570,440	12,132,504	29,059,284	28,424,313
Retirements.....	6,642,515	5,028,926	1,858,862	1,000,335	754,090	1,311,325	4,029,663	2,717,266
Deferred maintenance.....	*2,447,762	*2,871,102	*71,833	*183,656	*783,916	*173,268	*1,592,013	*2,514,178
Amortization of defense projects.....	1,271,782	734,581	93,793	62,631	305,754	212,307	872,235	459,643
Equalization.....	2,469,472	4,378,288	713,216	1,683,015	1,788,635	848,953	*32,379	1,846,320
All other.....	684,856,723	597,603,447	248,195,604	210,477,926	146,379,888	134,980,499	290,281,231	252,145,022
Maintenance of equipment.....	969,434,864	883,450,087	412,622,425	378,823,775	196,154,124	179,219,465	360,658,315	325,406,847
Depreciation.....	142,521,544	133,885,712	56,151,145	53,975,727	31,671,155	29,345,390	54,699,244	50,564,595
Retirements.....	*721,647	*254,067	*82,389	*43,813	*146,091	*69,655	*493,167	*140,599
Deferred maintenance and major repairs.....	*2,376,712	*2,908,536	*1,000	*2,820	*669,205	*1,192,929	*1,706,507	*1,712,787
Amortization of defense projects.....	8,626,074	8,738,419	3,165,326	3,252,525	1,672,661	1,753,843	3,788,087	3,732,051
Equalization.....	1,878,864	553,381	524,286	*62,828	1,394,866	614,979	*40,288	1,230
All other.....	819,506,741	743,435,178	352,865,057	321,704,984	162,230,738	148,767,837	304,410,946	272,962,357
Traffic.....	111,271,785	99,733,015	37,935,853	34,515,952	24,458,942	21,310,939	48,876,990	43,906,124
Transportation—Rail line.....	2,196,344,242	1,935,151,562	935,490,517	842,732,439	409,407,975	361,978,413	851,445,750	730,440,710
Miscellaneous operations.....	76,084,563	72,697,444	28,966,579	27,088,529	11,554,829	10,935,100	35,563,155	34,673,815
General.....	156,771,788	138,603,554	59,920,696	53,648,807	34,130,585	30,216,764	62,720,507	54,737,983
Railway operating expenses.....	4,275,076,138	3,805,390,575	1,756,472,154	1,580,173,709	836,721,346	752,973,001	1,681,882,638	1,472,243,865
Net revenue from railway operations.....	1,173,636,664	1,053,187,268	406,809,519	351,920,881	259,313,406	236,603,832	507,513,739	464,662,555
Railway tax accruals.....	557,600,751	526,700,385	195,997,673	181,343,809	130,347,998	122,912,828	231,255,080	222,443,748
Pay-roll taxes.....	156,102,467	199,325,631	64,756,404	83,420,942	31,708,822	39,059,325	59,637,241	76,845,364
Federal income taxes.....	220,757,604	165,234,607	62,327,181	35,410,650	60,985,607	50,305,069	97,444,816	79,518,888
All other taxes.....	180,740,680	162,140,147	68,914,088	62,512,217	37,653,569	33,548,434	74,173,023	66,079,496
Railway operating income.....	616,035,913	526,486,883	210,811,846	170,577,072	128,955,408	113,691,004	276,258,659	242,218,807
Equipment rents—Dr. balance.....	77,008,873	71,881,417	35,908,696	34,041,342	*7,489,474	*2,703,090	48,589,651	40,543,165
Joint facility rent—Dr. balance.....	22,837,513	24,001,897	10,879,729	11,640,650	3,345,571	3,713,479	8,612,213	8,647,768
Net railway operating income.....	516,189,527	430,603,569	164,023,421	124,895,080	133,109,311	112,680,615	219,056,795	193,027,874
Ratio of expenses to revenues (percent)	78.5	78.3	81.3	81.8	76.3	76.1	76.8	76.0

* Includes credits amounting to \$37,381,972 for reduction in unemployment insurance from 3.0 percent to 0.5 percent retroactive to January 1.

* Decrease, deficit, or other reverse item.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

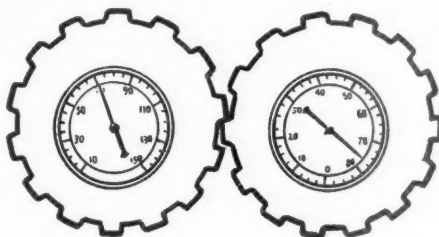
Revenue and Expense table appears on next left-hand page

Electro-Pneumatic Brake



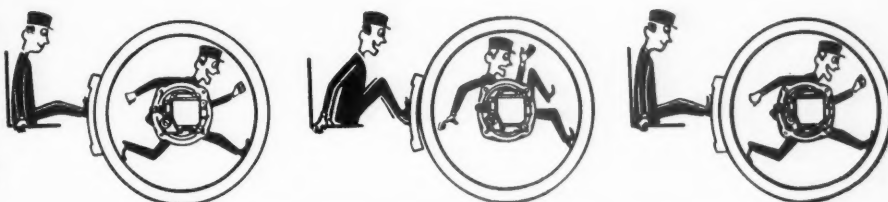
BRAKING IMPULSE TRANSMITTED TO EVERY CAR "IN A FLASH"

Speed Governor Control



MAXIMUM BRAKING PRESSURE "GEARED" TO SPEEDS

"AP" Decelostat



BRAKE PRESSURES MOMENTARILY "EASED" IN CASE OF WHEEL SLIP

WESTINGHOUSE HSC EQUIPMENT

gives a 3-Way Boost to Braking Efficiency

This modern equipment helps your trains to *make* time by *saving* time—improves schedules by bettering *average* speeds without increasing *top* speeds.

Braking pressure starts to develop on every car the moment the engineman applies the brake. Storage reservoirs are continuously recharged as air is used. Maximum retardation is assured by the Speed Governor Control which graduates maximum braking pressures to speeds, and by the "AP"

Decelostat which momentarily "eases" braking pressures on individual trucks if wheel slip threatens.

Experience with the "HSC" Electro-Pneumatic Brake has indicated that on the average 1,000 mile run, the running time can be reduced as much as one hour—with increased passenger comfort. Sixty minutes snipped off the schedule, with no rise in existing speed ceilings. The saving and service possibilities are obvious.



Westinghouse Air Brake Co.

WILMERDING, PA.



ABC NETWORK - Monday Nights

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF SEPTEMBER AND NINE MONTHS OF CALENDAR YEAR 1948

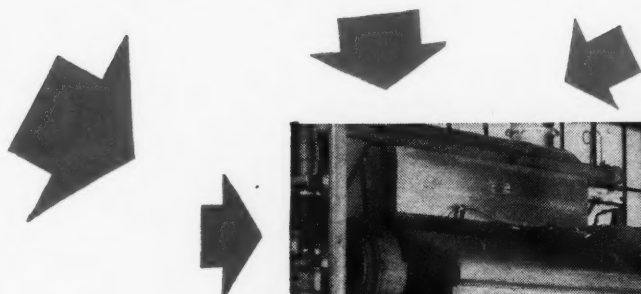
Name of road	Ave. mileage operated during period	Operating revenues				Operating Expenses				Operating ratio	Net from railway operation	Net railway operating income	
		Freight	Passenger	Total	Way and Equip- ment	Traffic	Trans- portation	Total	Railway tax-accruals			1948	1947
Akron, Canton & Youngstown.....	171	464,162	69	464,231	48,440	26,104	135,824	314,335	65.0	169,105	169,105	82,003	49,609
Atchison, Topeka & Santa Fe.....	171	4,217,501	687	4,899,088	421,860	234,095	1,220,689	2,722,817	61.9	1,673,670	1,673,670	630,004	849,853
Atchison, Topeka & Santa Fe.....	13,080	33,876,571	4,930,559	38,807,130	7,506,151	943,615	14,206,800	30,775,494	71.8	12,110,642	12,110,642	6,036,159	4,263,413
Atlanta & St. Andrews Bay.....	13,081	313,442,468	40,510,203	353,952,671	66,985,818	8,551,512	136,079,906	285,536,211	73.7	101,896,045	101,896,045	50,787,661	38,100,554
Atlanta & St. Andrews Bay.....	82	168,988	2,317	170,305	23,968	6,373	45,473	104,047	57.8	76,046	76,046	26,902	17,171
Atlanta & West Point.....	82	1,697,405	15,317	1,712,722	137,354	56,065	457,048	961,373	54.0	818,023	818,023	291,519	348,433
Atlanta & West Point.....	93	287,142	47,280	334,422	49,413	14,185	182,171	317,718	83.1	64,674	64,674	29,430	15,742
Western of Alabama.....	93	2,546,671	471,211	3,017,882	455,919	123,045	1,655,563	2,799,360	81.7	729,615	729,615	299,269	151,597
Atlantic Coast Line.....	133	304,729	45,157	350,886	54,247	14,104	165,493	305,312	79.6	78,384	78,384	36,395	24,389
Atlantic Coast Line.....	133	2,572,496	461,709	3,034,205	520,394	122,599	1,437,360	2,629,458	78.5	721,432	721,432	383,172	326,499
Atlantic Coast Line.....	5,569	7,452,074	1,255,295	8,707,369	946,272	2,045,862	4,418,423	9,167,741	99.9	12,537	12,537	700,000	-657,566
Atlantic Coast Line.....	5,571	80,414,778	103,511,263	183,926,041	17,642,417	2,616,693	43,724,417	87,579,774	84.6	15,931,489	15,931,489	8,850,000	4,779,726
Charleston & Western Carolina.....	343	378,708	5,830	384,538	75,297	14,387	156,289	333,659	84.3	61,989	61,989	30,000	23,472
Baltimore & Ohio.....	343	3,692,869	38,646	3,731,515	676,023	129,349	1,527,035	3,103,366	81.0	729,615	729,615	295,000	336,348
Baltimore & Ohio.....	6,192	2,091,626	2,091,626	4,183,252	7,334,386	712,056	13,603,214	27,603,288	79.1	7,289,985	7,289,985	2,745,732	4,218,460
Staten Island Rapid Transit.....	6,192	264,268,147	18,243,351	282,511,498	60,862,684	6,347,898	125,015,533	240,727,974	80.4	58,532,071	58,532,071	23,027,896	33,465,728
Staten Island Rapid Transit.....	29	73,137	297,891	371,028	39,692	1,498	134,063	248,132	83.3	49,759	49,759	35,013	-61,549
Rangor & Aroostook.....	29	1,665,298	926,516	2,591,814	520,470	14,565	1,423,894	2,596,408	95.1	132,393	132,393	345,460	-398,041
Bessemer & Lake Erie.....	602	611,287	50,597	661,884	172,129	8,676	230,718	688,798	98.7	9,104	9,104	48,172	8,066
Bessemer & Lake Erie.....	602	10,215,034	425,242	10,640,276	1,702,091	76,413	3,046,995	7,369,420	67.2	3,597,767	3,597,767	1,720,386	1,119,356
Boston & Maine.....	214	2,948,606	1,731	2,950,337	675,618	19,083	544,508	1,486,685	50.2	1,477,673	1,477,673	722,681	706,329
Boston & Maine.....	214	19,815,636	13,799	19,829,435	4,813,096	169,225	4,303,393	11,371,924	56.9	8,606,325	8,606,325	4,709,132	5,791,014
Boston & Maine.....	1,757	5,717,365	1,283,329	7,000,694	1,159,429	106,395	3,131,378	5,913,863	76.6	1,805,976	1,805,976	787,032	706,704
Burlington-Rock Island.....	1,757	52,424,726	11,292,963	63,717,689	10,454,483	923,229	28,990,751	54,807,917	78.2	15,316,153	15,316,153	6,353,174	4,203,56
Burlington-Rock Island.....	228	298,329	53,322	351,651	50,845	4,638	156,319	269,375	72.2	103,743	103,743	10,341	46,173
Cambria & Indiana.....	228	2,733,903	488,127	3,222,030	447,932	42,288	1,350,619	2,360,917	69.3	1,045,783	1,045,783	89,683	506,809
Canadian Pacific Lines in Maine.....	35	159,546	1,111,437	1,270,983	59,820	686	25,861	105,043	65.8	54,503	54,503	78,625	52,933
Canadian Pacific Lines in Maine.....	35	1,111,437	44,215	1,155,652	789,703	6,642	206,780	1,181,021	106.2	-69,133	-69,133	545,125	426,350
Canadian Pacific Lines in Maine.....	234	3,859,600	336,021	4,195,621	638,407	65,651	1,758,983	3,354,630	76.0	1,058,665	1,058,665	207,705	221,086
Canadian Pacific Lines in Vermont.....	90	159,649	13,865	173,514	37,762	4,638	156,319	269,375	72.2	103,743	103,743	10,341	46,173
Central of Georgia.....	90	1,451,411	156,575	1,607,986	318,533	47,029	1,382,997	2,587,662	123.6	-49,617	-49,617	12,973	113,282
Central of Georgia.....	1,815	2,569,203	255,053	2,824,256	504,694	96,760	1,448,424	2,727,994	86.1	334,864	334,864	182,264	137,174
Central of New Jersey.....	1,815	23,540,826	2,320,445	25,861,271	4,514,984	916,841	13,167,921	20,697,361	89.8	3,717,663	3,717,663	2,085,799	1,442,340
Central of New Jersey.....	417	2,966,018	576,806	3,542,824	566,449	53,291	1,086,368	3,100,615	81.7	695,826	695,826	398,459	14,046
Central of New Jersey.....	417	24,951,288	4,921,288	29,872,576	5,235,391	482,071	15,830,878	36,663,318	87.8	3,920,427	3,920,427	3,600,928	2,488,120
Central of Pennsylvania.....	213	1,809,586	17,633	1,827,219	286,682	23,587	519,245	1,024,939	54.7	847,143	847,143	70,783	1,037,925
Central of Pennsylvania.....	213	15,208,354	164,191	15,372,545	2,751,035	211,380	4,867,452	9,997,460	61.0	6,126,475	6,126,475	627,310	7,883,185
Central Vermont.....	422	718,000	76,000	794,000	135,155	16,926	323,031	677,510	79.7	1,775,490	1,775,490	45,373	86,278
Chesapeake & Ohio.....	422	6,655,000	600,000	7,255,000	1,289,354	124,927	3,270,692	4,053,315	81.3	1,446,708	1,446,708	405,315	327,056
Chesapeake & Ohio.....	5,075	27,598,682	1,036,229	28,634,911	5,007,058	584,672	9,813,013	21,037,296	70.0	9,613,803	9,613,803	4,119,780	5,229,768
Chesapeake & Ohio.....	5,074	229,614,093	8,664,991	238,279,084	36,395,680	6,246,808	88,720,519	188,419,181	75.5	61,217,737	61,217,737	34,942,079	33,153,253
Chicago & Eastern Illinois.....	909	2,187,322	324,978	2,512,300	339,520	102,544	1,150,612	2,289,048	82.0	497,484	497,484	194,800	175,836
Chicago & Eastern Illinois.....	909	19,018,388	2,773,575	21,791,963	4,489,121	877,725	10,172,549	19,820,365	82.4	4,225,527	4,225,527	1,639,900	1,518,380
Chicago & Illinois Midland.....	131	939,507	856	940,363	144,414	23,045	204,760	500,030	52.1	460,596	460,596	186,916	277,639
Chicago & North Western.....	131	6,864,696	8,194	6,872,890	803,057	221,613	7,238,658	13,997,266	59.5	2,853,253	2,853,253	1,199,871	1,650,481
Chicago & North Western.....	8,058	109,480,441	19,654,068	129,134,509	22,510,723	2,722,760	64,215,747	123,066,011	79.6	3,574,841	3,574,841	1,983,946	417,501
Chicago, Burlington & Quincy.....	8,058	17,469,485	1,798,409	19,267,894	3,617,639	369,406	7,044,396	14,640,763	69.3	6,473,365	6,473,365	3,242,993	2,699,846
Chicago, Burlington & Quincy.....	8,705	146,877,959	15,299,253	162,177,212	25,697,962	3,499,569	61,430,321	124,171,724	69.7	53,900,980	53,900,980	26,033,649	23,391,718
Chicago Great Western.....	1,500	2,817,043	50,731	2,867,774	325,826	105,691	1,108,352	2,183,484	70.9	7,898,069	7,898,069	301,671	338,842
Chicago, Indianapolis & Louisville.....	1,500	23,508,674	514,113	24,022,787	2,963,151	863,374	10,316,861	18,835,617	82.7	7,056,830	7,056,830	2,560,661	1,727,462
Chicago, Indianapolis & Louisville.....	541	1,446,274	121,393	1,567,667	236,922	83,699	612,863	1,355,517	70.7	3,222,876	3,222,876	1,442,202	1,038,031
Chicago, Milwaukee, St. Paul & Pacific.....	1,617	21,038,076	2,047,347	23,085,423	3,459,449	503,026	12,059,563	21,231,213	84.4	3,000,716	3,000,716	683,757	1,388,568
Chicago, Milwaukee, St. Paul & Pacific.....	10,671	20,034,548	1,958,807	22,000,355	3,695,471	415,710	9,188,868	17,715,276	73.3	6,460,926	6,460,926	2,857,000	2,799,140
Chicago, Rock Island & Pacific.....	10,671	183,607,345	16,287,152	199,894,497	32,548,984	3,623,154	81,250,321	155,832,863	82.6	32,467,672	32,467,672	18,010,000	11,152,557
Chicago, Rock Island & Pacific.....	7,644	119,830,123	17,231,074	137,061,197	22,932,416	4,431,032	56,822,272	107,823,401	72.3	4,541,338	4,541,338	2,031,378	1,700,801
Chicago, St. Paul, Minn. & Omaha.....	7,644	2,855,748	239,397	3,095,145	329,397	3,459,449	6,894,396	13,583,151	73.0	900,314	900,314	186,603	426,803
Clinchfield.....	317	1,538,983	5,064	1,544,047	260,883	33,806	419,638	901,738	58.0	851,677	851,677	165,973	594,090
Clinchfield.....	317	14,690,912	1,060,912	15,751,824	2,495,580	287,927	4,405,550	8,714,392	59.5	5,920,874	5,920,874	1,459,941	5,305,533
Colorado & Southern.....	745	8,453,537	706,839	9,160,376	1,981,100	24,269	500,628	966,505	76.3	1,840,496	1,840,496	1,067,569	128,199
Ft. Worth & Denver City.....	902	1,078,014	183,156	1,261,170	1,993,880	36,325	468,644	969,422	70.6	402,848	402,848	142,396	301,565
Ft. Worth & Denver City.....	902	9,706,198	1,325,962	11,032,160	1,610,866	353,012	4,326,262	8,726,052	73.1	3,213,569	3,213,569	1,138,966	1,589,165

Table continued on next left-hand page

Railway Age—November 13, 1948

Why Your Diesels Stay Cleaner

... and your costs
come down when you
lubricate with
Texaco Dieseltex HD



ACTUAL RAILROAD DIESEL installed in the Texaco Development Laboratories to prove performance of Diesel lubricating oils. Tests devised give oils far greater punishment than they would ever take in railroad service. Texaco testing goes on continually, always abreast of engine development. That is why *Texaco Dieseltex HD* keeps engines cleaner...operating costs lower.

CLEANER engines mean greater operating efficiency and economy... greater availability of locomotives... lower maintenance costs. You can count on these benefits when you use *Texaco Dieseltex HD*. These outstanding railroad Diesel lubricating oils have been performance-tested both in the laboratory and on the rails.

Texaco Dieseltex HD keeps rings free... valves active... bearings protected against corrosion. Your engines stay cleaner for extra thousands of miles between overhauls. *Texaco Dieseltex HD* is fully detergent and dispersive, with a new, heavy-duty additive

exceptionally effective in guarding against oxidation, rust and corrosion.

Texaco Dieseltex HD meets the most stringent requirements of all leading Diesel locomotive manufacturers.

Let a Texaco Lubrication Engineer — a man who "talks your language" — tell you how *Texaco Dieseltex HD* and Texaco's unique systematic engineering service can help improve Diesel performance and reduce costs. Call the nearest Railway Sales Division office listed below, or write The Texas Company, *Railway Sales Division*, 135 East 42nd Street, New York 17, N. Y.

NEW YORK • CHICAGO • SAN FRANCISCO • ST. PAUL • ST. LOUIS • ATLANTA



TEXACO Dieseltex HD

FOR ALL RAILROAD DIESELS

Tune in... TEXACO STAR THEATRE every Wednesday night starring Milton Berle. See newspaper for time and station.

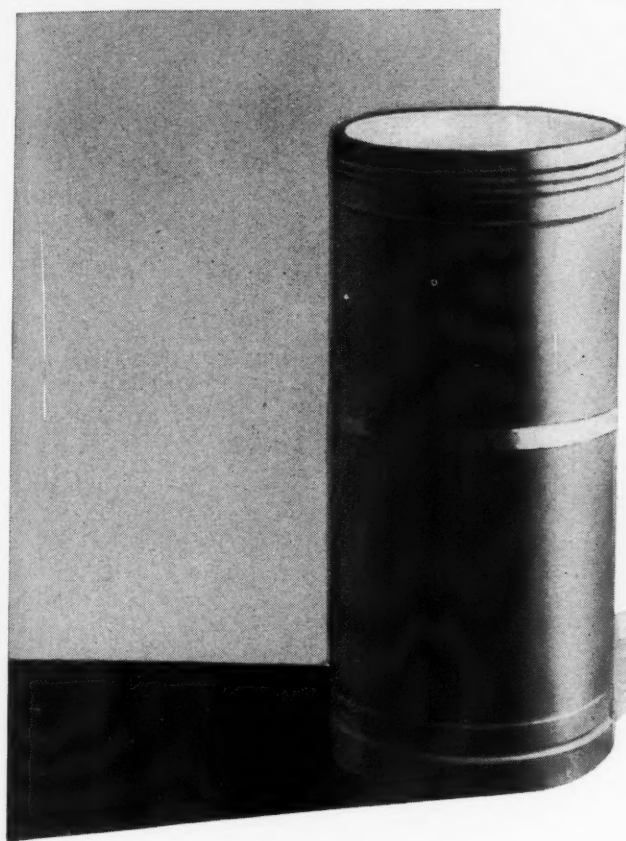
November 13, 1948

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF SEPTEMBER AND NINE MONTHS OF CALENDAR YEAR 1948

Name of road	Av. mileage operated during period	Operating revenues				Operating Expenses				Operating ratio	Net from railway operation	Net railway operating income		
		Freight	Passenger	Total (inc. misc.)	Maintenance of way and structures	Equip-ment	Traffic	Trans- portation	Railway tax-accruals			1948	1947	
Colorado & Wyoming.....	41	154,645	.....	234,403	18,146	21,378	370	85,227	131,650	56.1	102,763	51,120	50,367	35,181
.....	9 mos.	1,256,914	.....	2,016,154	113,430	202,064	8,987	743,269	1,124,093	55.7	892,061	366,308	521,634	292,508
Columbus & Greenville.....	168	1,755,991	.....	185,227	40,922	30,639	4,412	51,665	143,333	77.4	41,894	23,080	18,995	14,252
.....	9 mos.	1,360,195	4,336	1,452,676	394,925	240,296	69,708	448,559	1,226,851	84.5	225,825	133,804	127,817	140,175
Delaware & Hudson.....	794	4,814,190	269,266	5,237,693	694,273	1,042,719	49,737	1,887,068	3,861,454	73.7	1,376,239	651,484	735,534	399,878
.....	9 mos.	1,683,519	1,683,519	44,762,401	5,675,795	9,581,249	660,829	17,085,441	34,460,362	77.0	10,302,039	5,095,762	5,412,108	4,317,040
Delaware, Lackawanna & Western.....	973	6,233,518	909,191	7,813,794	1,011,462	1,250,893	141,376	3,082,271	5,686,499	72.8	2,127,295	953,782	1,120,869	548,723
.....	9 mos.	54,787,594	8,081,344	68,395,957	8,342,778	10,611,214	1,271,546	29,860,138	52,171,977	76.3	16,223,890	7,690,546	7,942,295	5,955,391
Denver & Rio Grande Western.....	2,443	5,877,423	271,940	6,401,339	758,464	999,157	148,890	2,227,589	4,387,354	68.5	2,013,985	763,087	1,150,246	684,733
.....	9 mos.	45,233,049	2,325,577	49,625,306	6,103,380	7,892,785	1,263,156	17,670,631	35,223,589	71.0	14,401,717	5,454,774	9,157,296	5,393,400
Detroit & Mackinac.....	230	1,709,995	.....	987	184,246	22,963	1,325	38,140	103,468	56.8	78,780	29,972	45,878	48,114
.....	9 mos.	1,512,561	10,178	1,627,192	299,500	190,196	13,547	320,310	893,250	54.9	733,942	278,717	435,432	299,865
Detroit & Toledo Shore Line.....	50	491,402	.....	494,143	62,693	49,711	12,385	154,497	289,037	58.5	205,106	59,523	75,384	20,071
.....	9 mos.	4,873,544	.....	4,900,992	443,192	373,390	107,868	1,468,548	2,485,275	50.7	2,415,717	676,052	806,670	630,911
Detroit, Toledo & Ironton.....	464	1,271,598	.....	1,314,773	156,841	229,231	21,578	306,758	747,572	56.9	567,201	207,591	339,700	172,610
.....	9 mos.	11,018,888	7,379	11,519,687	1,293,976	2,199,665	190,178	2,890,268	6,886,335	59.8	4,633,352	1,762,347	2,871,005	1,731,703
Duluth, Missabe & Iron Range.....	578	5,268,478	3,697	6,145,925	571,782	433,137	7,254	1,409,304	2,492,309	40.6	3,663,616	1,699,711	1,959,912	1,752,708
.....	9 mos.	31,302,251	25,032	36,644,638	4,682,007	4,103,183	64,832	9,592,126	19,003,195	51.9	17,641,443	3,506,789	9,126,449	8,247,972
Duluth, Winnipeg & Pacific.....	175	381,000	1,500	390,200	64,409	50,596	4,332	161,499	287,250	73.6	102,950	27,575	21,374	27,983
.....	9 mos.	3,398,400	14,100	3,960,099	301,877	426,002	31,678	1,388,895	2,541,250	74.8	1,832,144	722,122	919,851	157,168
Elgin, Joliet & Eastern.....	238	3,988,775	.....	3,960,099	301,877	493,154	26,360	1,200,685	2,127,955	53.7	1,832,144	722,122	919,851	320,432
.....	9 mos.	28,564,043	43	34,203,051	3,111,811	4,769,616	238,177	12,301,870	20,512,012	60.0	13,691,038	5,256,787	5,896,887	4,005,020
Erie.....	2,229	13,404,136	700,886	15,175,230	1,969,386	2,230,577	309,674	5,706,914	10,837,968	71.4	4,337,282	1,651,212	2,136,843	450,451
.....	9 mos.	115,630,232	6,207,202	130,425,118	15,409,366	20,671,261	2,672,634	52,996,940	97,460,968	74.7	32,984,192	14,355,232	14,321,932	7,473,775
Florida East Coast.....	575	1,178,933	383,319	1,733,458	347,813	381,546	66,523	772,355	1,710,080	98.7	23,378	132,221	153,917	279,937
.....	9 mos.	14,305,510	5,655,469	21,962,353	3,411,659	3,755,431	576,991	8,844,631	18,162,704	82.7	3,799,649	1,251,336	1,621,805	618,828
Georgia Railroad.....	326	686,891	35,494	774,517	102,576	100,634	27,806	359,050	617,108	79.7	157,409	19,996	58,239	54,239
.....	9 mos.	5,844,666	305,709	6,569,207	845,808	939,298	245,872	3,145,084	5,418,776	82.5	1,150,431	323,492	960,675	482,651
Georgia & Florida.....	408	208,275	2,396	216,778	54,537	32,173	13,647	97,568	207,402	95.7	9,376	1,061	1,789	45,796
.....	9 mos.	2,044,682	17,944	2,116,177	540,301	293,527	116,612	885,015	1,911,015	90.3	205,162	127,960	55,272	96,049
Grand Trunk Western.....	972	4,299,000	209,000	4,792,000	741,224	713,586	71,504	1,773,720	3,452,400	72.1	1,339,591	218,849	978,578	112,801
.....	9 mos.	38,872,000	1,659,000	38,082,000	5,940,742	6,469,035	532,130	16,993,971	31,334,723	82.3	6,747,277	1,996,362	3,475,082	2,591,440
Canadian Nat'l Lines in New Eng.....	172	170,000	14,000	194,000	72,382	73,328	3,505	113,937	228,071	117.2	34,071	21,648	91,299	118,557
.....	9 mos.	1,543,000	96,300	1,761,000	638,677	351,015	25,103	1,140,036	2,226,490	127.2	475,490	194,823	975,772	558,051
Great Northern.....	8,333	1,254,166	1,055,571	23,986,963	3,046,508	3,032,237	399,610	7,614,438	14,998,370	59.7	9,656,920	4,312,447	4,882,184	3,281,165
.....	9 mos.	133,152,611	9,385,567	155,032,929	27,988,555	25,033,239	2,994,692	58,065,432	119,454,059	77.1	35,578,870	14,638,045	18,862,887	15,494,988
Green Bay & Western.....	224	287,892	48	295,695	109,016	40,269	18,261	91,856	274,033	92.7	21,662	11,178	8,832	31,624
.....	9 mos.	2,667,945	336	2,728,633	716,638	294,600	161,640	823,550	2,127,407	78.0	601,126	285,889	160,980	82,266
Gulf, Mobile & Ohio.....	2,905	5,839,360	509,111	6,822,653	1,145,573	1,081,829	210,343	2,046,039	4,770,528	69.9	2,055,125	778,250	982,012	493,851
.....	9 mos.	51,148,511	4,831,385	60,217,711	10,304,977	10,003,788	1,989,245	19,153,266	44,762,370	73.8	15,729,343	6,085,354	6,777,516	5,136,362
Illinois Central.....	6,567	17,727,805	2,105,404	22,112,496	4,000,089	3,832,237	424,644	7,614,438	16,998,973	75.9	5,324,923	2,778,459	2,527,049	1,584,282
.....	9 mos.	157,200,331	19,255,851	197,077,403	32,527,748	33,514,078	3,815,481	71,352,470	149,443,013	75.8	47,634,390	23,894,634	21,464,883	18,246,370
Illinois Terminal.....	474	968,257	115,988	1,187,382	169,665	130,770	27,790	416,695	784,938	66.1	402,444	171,427	199,904	168,695
.....	9 mos.	7,789,954	1,100,091	9,828,081	1,402,733	1,226,194	259,241	5,544,241	6,779,489	69.0	3,051,592	1,306,278	1,474,586	1,291,224
Kansas City Southern.....	890	3,157,030	96,365	3,514,465	314,840	420,931	94,887	950,985	1,903,658	54.2	1,610,807	578,000	881,124	658,044
.....	9 mos.	27,397,629	883,941	30,504,541	2,492,802	3,560,524	767,620	8,476,762	16,368,504	53.7	14,136,037	5,376,000	7,525,515	5,255,550
Kansas, Oklahoma & Gulf.....	328	4,999,743	.....	503,647	63,124	30,969	16,154	129,317	257,634	51.0	246,634	108,384	105,558	51,020
.....	9 mos.	4,204,112	8,329	4,248,677	502,184	331,307	145,738	1,161,516	2,298,463	54.1	1,950,208	831,400	770,453	752,395
Lake Superior & Ishpeming.....	156	286,632	53	356,637	52,722	38,902	1,603	723,872	213,640	59.9	142,997	71,158	74,370	147,232
.....	9 mos.	2,373,797	600	2,969,700	443,471	411,090	14,262	723,672	1,680,255	56.6	1,289,445	663,998	692,664	723,014
Lehigh & Hudson River.....	96	277,632	.....	278,283	47,961	37,339	8,887	92,006	194,816	70.0	31,623	27,064	13,373	13,373
.....	9 mos.	2,530,331	.....	2,538,883	392,202	337,792	72,266	909,177	1,752,333	70.4	752,333	291,570	242,270	175,591
Lehigh & New England.....	193	835,272	.....	840,518	74,521	106,581	10,345	210,700	431,643	51.4	408,875	179,898	245,159	184,952
.....	9 mos.	6,632,692	.....	6,702,906	773,628	945,775	99,011	2,098,005	4,194,185	62.6	2,508,721	1,143,088	1,473,969	1,053,759
Lehigh Valley.....	1,252	6,092,827	357,190	6,803,564	927,399	995,268	136,820	2,778,635	5,062,242	74.4	1,741,322	454,633	1,180,115	172,241
.....	9 mos.	53,244,486	3,190,589	59,475,126	8,174,062	9,328,42								

HSGI DIESEL LINERS



EVERYTHING
you want...
and MORE



Hunt-Spiller are exclusive railroad sales representatives for Double Seal Piston Rings made for Diesel and other services. Double Seal rings are cast from Hunt-Spiller Air Furnace Gun Iron.

NO RAILROAD buys this most important single item of Diesel maintenance blindly. They demand assurance of satisfactory performance and long life. The liners they choose must have superior machining qualities. Prompt service is all-important. All these specifications—and more—are met by Hunt-Spiller Diesel liners, made of the famous *air-furnace* gun iron whose dense, evenly graphited structure has proved to be superior for intense Diesel service.

HSGI Diesel Liners are available for any type of Diesel, either honed, chrome plated, or in rough castings for finishing in your own shops.



HUNT-SPILLER MFG. CORPORATION

N. C. RAYMOND, President

E. J. FULLER, Vice-Pres. & Gen. Mgr.

383 Dorchester Ave. ★ South Boston 27, Mass.

Canadian Representatives: Joseph Robb & Co., Ltd., 4050 Namur St., Montreal 16, P. Q.

Export Agents:

International Rwy. Supply Co., 30 Church Street, New York 7, N. Y.

Cylinder Bushings
Cylinder Packing Rings
Pistons or Piston Bull Rings
Valve Bushings
Valve Packing Rings
Valve Bull Rings

Crankshaft Shoes
Hub Liners
Shoes and Wedges
Floating Rod Bushings
Light Weight Valves
Cylinder Liners and Pistons
for Diesel Service

Dunbar Sectional Type Packing
Duplex Sectional Type Packing
for Cylinders and Valves
(Duplex Springs for Above
Sectional Packing)
Cylinder Snap Rings
Valve Rings, All Shapes

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF SEPTEMBER AND NINE MONTHS OF CALENDAR YEAR 1948

Name of road	Av. mileage operated during period	Operating revenues				Operating expenses				Operating ratio	Net railway operation from	Net railway operating income	
		Freight	Passenger	Total (inc. misc.)	Maintenance of way and structures	Equipment	Traffic	Trans- portation	Total			1948	1947
Maine Central.....	988	1,692,650	183,950	2,028,571	446,921	440,087	17,825	776,908	1,749,550	86.3	277,021	118,400	94,122
.....	9 mos.	17,008,028	1,667,400	19,946,933	3,675,627	3,675,627	159,555	7,527,751	15,728,665	78.9	4,218,268	1,890,645	1,516,336
Midland Valley.....	324	1,511,837	175	1,549,646	355,404	181,788	3,120	58,055	1,347,688	70.6	437,056	21,013	186,915
.....	9 mos.	13,934,391	1,793,391	15,927,782	3,252,672	2,592,672	99,803	503,147	11,320,990	73.1	3,048,308	1,337,113	1,372,845
Minneapolis & St. Louis.....	1,404	14,210,197	83,983	14,775,522	2,710,999	2,390,987	900,447	4,954,510	11,727,516	79.4	2,208,455	1,232,023	513,612
.....	9 mos.	142,474,723	200,025	142,674,748	26,474,748	26,474,748	62,660	11,385,012	26,707,939	54.7	2,208,455	1,232,023	513,612
Minn., St. Paul & S. Ste. Marie.....	3,225	23,929,617	1,072,931	25,002,548	5,320,570	4,639,654	62,660	11,385,012	22,477,989	84.4	4,139,187	1,450,364	937,184
.....	9 mos.	239,929,617	10,729,311	250,658,928	53,205,700	46,396,544	626,600	113,850,112	224,779,889	84.4	41,391,877	14,503,364	9,371,184
Duluth, South Shore & Atlantic.....	530	4,429,579	97,296	4,775,616	978,603	807,155	146,645	1,849,745	1,400,366	81.1	900,751	532,107	352,639
.....	9 mos.	44,295,799	972,966	45,268,765	9,786,033	8,071,555	1,466,455	18,497,455	14,003,666	81.1	9,007,511	5,321,077	3,526,339
Spokane International.....	152	1,455,143	13,481	1,574,116	349,469	179,543	34,437	553,420	1,200,199	76.3	373,917	134,122	120,851
.....	9 mos.	14,555,143	134,811	14,690,000	3,494,690	1,795,433	344,377	5,534,220	12,001,999	76.3	3,739,117	1,341,222	1,208,511
Mississippi Central.....	148	1,085,927	—322	1,085,605	37,828	21,871	12,109	46,309	125,943	62.0	77,057	30,982	11,594
.....	9 mos.	10,859,277	-3,222	10,856,055	378,288	218,711	121,099	463,099	1,259,433	62.0	770,567	309,982	115,994
Missouri-Illinois.....	172	3,365,618	334	3,699,652	739,638	464,634	6,819	97,157	2,366,505	94.1	1,332,357	59,926	60,733
.....	9 mos.	33,656,118	3,344	33,659,462	7,396,388	4,646,344	68,119	971,577	23,666,505	94.1	13,323,577	599,266	60,733
Missouri-Kansas-Texas Lines.....	3,253	52,184,916	413,009	52,597,925	8,084,311	8,100,104	1,921,930	23,871,540	44,423,737	73.6	15,916,912	6,083,045	4,034,028
.....	9 mos.	521,849,166	4,130,099	525,980,265	80,843,111	81,001,104	19,219,300	238,715,540	444,237,377	73.6	159,169,122	60,830,455	40,340,228
Missouri Pacific.....	7,012	15,750,271	1,179,471	16,929,742	3,212,793	2,653,446	375,224	7,040,808	13,885,640	74.3	4,810,731	1,868,977	872,913
.....	9 mos.	157,502,711	11,794,711	169,297,422	32,127,933	26,534,466	3,752,224	70,408,088	138,856,400	74.3	48,107,311	19,867,977	15,752,011
Gulf Coast Lines.....	1,724	2,703,373	94,769	2,798,142	630,512	420,920	6,819	1,092,263	2,291,061	77.5	663,034	197,227	319,195
.....	9 mos.	27,033,373	947,699	28,000,000	6,305,120	4,209,200	68,119	10,922,633	23,845,405	77.5	6,630,344	2,000,000	1,319,195
International-Great Northern.....	1,110	2,302,083	207,802	2,509,885	649,711	425,697	49,932	1,166,871	2,213,473	80.2	1,446,664	1,009,451	1,683,381
.....	9 mos.	23,020,833	2,078,022	25,098,855	6,497,111	4,256,967	499,322	11,668,871	22,134,733	80.2	14,466,664	10,094,511	16,833,381
.....	9 mos.	21,022,742	1,780,261	22,803,003	4,224,477	3,734,023	449,259	11,359,418	20,867,549	83.4	397,928	92,678	72,728
Monongahela.....	170	767,081	1,080	768,161	82,464	73,453	1,032	213,485	376,306	48.5	3,005,821	1,336,740	36,510
.....	9 mos.	7,670,811	10,800	7,681,611	824,644	734,533	10,322	2,134,855	3,763,066	48.5	3,005,821	1,336,740	36,510
Montour.....	51	324,173	—	324,173	19,702	85,394	726	93,653	207,817	63.7	118,310	100,655	552,765
.....	9 mos.	3,241,733	—	3,241,733	197,022	853,944	7,266	936,533	2,078,117	63.7	1,183,110	1,006,555	552,765
Nashville, Chatt. & St. Louis.....	1,051	2,487,945	188,396	2,676,341	414,448	507,198	104,182	1,201,736	2,352,597	80.4	571,974	300,061	1,240,724
.....	9 mos.	24,879,455	1,883,966	26,763,421	4,144,448	5,071,988	1,041,822	12,017,366	23,525,977	80.4	5,719,744	3,000,611	1,240,724
New York Central.....	10,745	47,866,459	11,718,274	59,584,733	10,887,552	13,360,475	1,031,271	25,312,102	56,690,109	84.4	10,449,703	4,611,970	4,201,748
.....	9 mos.	478,664,599	117,182,744	595,847,343	108,875,552	133,604,475	10,312,711	253,121,102	566,901,109	84.4	104,449,703	46,119,970	42,017,488
Pittsburgh & Lake Erie.....	223	3,174,699	889,852	4,064,551	4,039,179	8,362,036	566,668	1,174,427	2,617,153	78.3	2,946,734	1,131,956	1,516,688
.....	9 mos.	31,746,999	8,898,522	40,645,521	40,391,799	83,620,366	5,666,668	11,744,427	26,175,153	78.3	2,946,734	1,131,956	1,516,688
New York, Chicago & St. Louis.....	1,687	77,954,045	1,173,190	79,127,235	10,337,676	12,067,788	1,887,435	28,482,845	55,470,010	68.5	25,452,978	9,654,123	7,015,622
.....	9 mos.	779,540,455	11,731,900	791,272,355	103,376,766	120,677,888	18,874,355	284,828,445	554,700,010	68.5	25,452,978	9,654,123	7,015,622
New York, New Haven & Hartford.....	1,800	8,183,143	4,825,067	12,998,210	2,084,267	2,151,366	241,948	5,068,944	11,002,922	75.2	3,437,608	1,441,000	1,059,932
.....	9 mos.	81,831,433	48,250,677	130,082,110	20,842,677	21,513,666	2,419,488	50,689,944	110,029,922	75.2	34,376,088	14,410,000	10,599,932
New York Connecting.....	21	217,756	—	217,756	244,883	170,864	—	624,415	1,450,879	64.4	800,392	563,547	108,072
.....	9 mos.	2,177,566	—	2,177,566	2,448,833	1,708,644	—	6,244,155	14,508,799	64.4	8,003,392	5,635,547	1,080,722
New York, Ontario & Western.....	544	5,408,773	158,567	5,567,340	1,036,465	991,742	268,787	3,118,370	5,694,821	94.7	315,600	374,217	—837,673
.....	9 mos.	54,087,733	1,585,677	55,673,410	10,364,655	9,917,422	2,687,877	31,183,370	56,948,821	94.7	3,156,000	3,742,217	—837,673
New York, Susquehanna & Western.....	120	352,588	46,307	398,895	37,515	51,048	6,502	105,273	282,131	67.9	133,550	28,404	18,519
.....	9 mos.	3,525,888	463,077	3,988,965	375,155	510,488	65,022	1,052,733	2,821,131	67.9	1,335,500	28,404	18,519
Norfolk & Western.....	2,129	15,189,372	519,129	15,708,501	1,983,776	2,789,930	288,147	4,776,320	10,130,279	64.1	5,828,957	3,056,658	2,704,726
.....	9 mos.	151,893,722	5,191,299	157,085,021	19,837,766	27,899,300	2,881,477	47,763,320	101,302,799	64.1	58,289,567	30,566,658	27,047,226
Norfolk Southern.....	726	831,476	—	831,476	1,590,076	762,747	355,964	2,614,648	5,677,989	75.0	1,889,574	943,131	260,506
.....	9 mos.	8,314,766	—	8,314,766	15,900,766	7,627,477	3,559,964	26,146,488	56,779,889	75.0	18,895,744	9,431,131	2,605,006
Northern Pacific.....	6,889	99,022,379	5,439,510	104,461,889	19,363,521	21,120,961	2,267,791	41,357,257	89,740,065	73.0	5,766,604	2,349,629	1,522,192
.....	9 mos.	990,223,799	54,395,100	1,044,618,899	193,635,211	211,209,611	22,677,911	413,572,567	897,400,065	73.0	57,666,004	2,349,629	1,522,192
Northwestern Pacific.....	331	755,181	8,805	763,986	1,429,909	754,196	37,477	2,958,097	5,905,610	82.3	1,145,412	317,970	420,821
.....	9 mos.	7,551,811	88,055	7,640,000	14,299,009	7,541,966	374,777	29,580,907	59,055,610	82.3	11,454,122	3,179,970	420,821
Oklahoma City-Ada-Atoka.....	132	786,649	—	786,649	191,663	37,791	11,455	200,036	474,596	59.2	326,959	127,716	100,937
.....	9 mos.	7,866,499	—	7,866,499	1,916,633	377,911	114,555	2,000,036	4,745,596	59.2	3,269,959	127,716	100,937
Pennsylvania.....	10,108	65,676,352	14,050,341	79,726,693	10,702,151	16,715,940	1,133,931	38,299,788	67,894,568	77.6	19,534,287	7,834,396	1,084,334
.....	9 mos.	656,763,522	140,503,411	797,266,933	107,021,511	167,159,400	11,339,311	382,997,788	678,945,568	77.6	195,342,887	78,343,396	10,843,334
Long Island.....	376	12,234,052	25,597,964	37,832,016	6,106,222	6,979,327	269,944	20,801,742	34,994,880	87.9	4,824,447	4,066,927	—2,086,253
.....	9 mos.	122,340,522	255,979,964	378,320,486	61,062,222	69,793,327	2,699,944	208,017,422	349,948,880	87.9	48,244,447	40,669,927	—2,086,253

Table continued on next left-hand page

The Sign of QUALITY

Esso

The Symbol of SERVICE

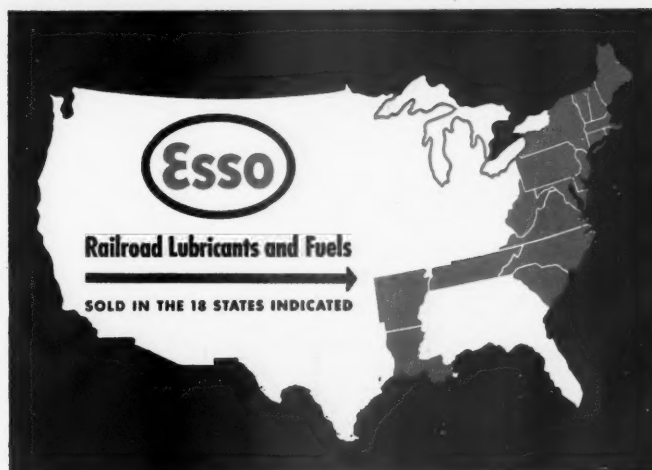


He's a lot more than a Salesman...

He's an *expert* on all railroad lubrication problems. That's why we call him our **Esso Sales Engineer**. He makes a constant study of railroad equipment...and *follows up* every application of Esso Fuels and Lubricants.

He not only carefully examines the results shown on equipment-lubrication inspection sheets...he also spends a lot of time out in the shop where equipment is stripped down.

The first-hand knowledge of an Esso Sales Engineer is at your service. Be sure to call for him...and for the high-quality Esso Railroad Products that will help your equipment deliver the excellent performance it was built to give.



ESSO STANDARD OIL COMPANY

Boston, Mass.—New York, N. Y.—Elizabeth, N. J.—Baltimore, Md.
Richmond, Va.—Charleston, W. Va.—Charlotte, N. C.
Columbia, S. C.—Memphis, Tenn.—Little Rock, Ark.—New Orleans, La.
ESSO STANDARD OIL COMPANY OF PENNSYLVANIA
Philadelphia, Pa.

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF SEPTEMBER AND NINE MONTHS OF CALENDAR YEAR 1948

Name of road	Av. mileage operated during period	Operating revenues				Operating Expenses				Operating ratio	Net from railway operation	Net railway operating income		
		Freight	Passenger	Total (inc. misc.)	Maintenance of way and structures	Equipment	Traffic	Trans- portation	Total			Railway tax-accruals	1948	1947
Pennsylvania-Reading Seashore Lines.	386	683,240	449,127	1,132,367	1,185,265	131,382	11,253	690,301	1,067,899	90.1	117,366	91,059	-137,330	-164,193
Pennsylvania-Reading Seashore Lines.	9 mos.	5,196,024	3,672,361	8,868,385	8,965,679	1,090,358	100,335	5,721,634	9,047,936	97.9	195,630	864,898	-1,949,555	-1,260,220
Pittsburgh & Shawmut.	97	251,579	282,712	534,291	534,291	40,955	2,430	70,161	191,836	75.9	60,876	32,617	12,176	42,106
Pittsburgh & Shawmut.	9 mos.	2,387,829	2,887,829	5,275,658	5,275,658	364,845	28,235	654,588	1,694,337	66.5	801,782	305,024	365,917	479,229
Pittsburgh & West Virginia.	135	728,482	116,102	844,584	844,584	139,920	40,631	171,277	1,015,861	64.4	271,474	116,541	164,184	75,523
Pittsburgh & West Virginia.	9 mos.	6,228,398	1,129,068	7,357,466	7,357,466	1,129,068	349,751	1,541,715	4,243,311	65.4	2,245,789	1,004,043	1,453,815	869,776
Reading.	1,338	10,224,711	672,754	10,897,465	11,449,139	2,139,197	120,240	4,002,919	8,745,291	76.4	2,703,848	1,214,083	1,387,417	649,319
Reading.	9 mos.	85,275,092	5,974,699	91,249,791	96,060,445	18,161,150	1,139,560	37,328,166	75,254,525	78.3	20,805,920	9,872,617	10,402,820	8,861,251
Richmond, Fredericksburg & Potomac.	118	1,095,441	471,488	1,566,929	1,796,367	283,851	312,514	718,458	1,449,586	80.7	347,281	181,704	121,950	7,445
Richmond, Fredericksburg & Potomac.	9 mos.	12,242,338	5,234,694	17,477,032	24,988,467	2,867,301	171,631	7,841,593	14,518,328	73.4	5,192,915	2,326,077	2,087,930	1,919,957
Rutland.	407	445,731	53,015	498,746	591,963	79,117	103,934	278,695	493,572	83.4	98,091	29,709	48,234	-6,347
Rutland.	9 mos.	3,693,076	353,989	4,047,065	4,774,425	855,784	124,330	2,469,180	4,255,301	89.1	519,124	268,888	93,330	-530,144
Sacramento Northern.	269	1,553,443	156	1,553,599	264,316	22,517	2,175	94,543	218,677	82.7	45,639	14,166	9,733	-11,622
Sacramento Northern.	9 mos.	15,534,443	1,611,782	17,146,225	818,387	194,107	21,107	653,130	1,752,431	108.5	-136,649	117,757	-372,700	-345,678
St. Louis-San Francisco.	4,645	71,059,426	680,768	71,740,194	9,948,978	1,497,306	234,450	3,621,722	7,309,596	75.8	2,339,382	1,231,380	1,276,567	650,498
St. Louis-San Francisco.	9 mos.	71,059,426	5,067,881	76,127,307	8,067,271	127,16,296	13,587,187	2,178,632	35,304,716	81.2	15,588,773	8,331,251	8,056,493	6,935,634
St. Louis, San Francisco & Texas.	159	3,275,092	116,971	3,392,063	3,565,845	456,095	30,966	1,588,407	2,597,745	72.8	971,100	397,400	355,285	32,890
St. Louis, San Francisco & Texas.	9 mos.	4,927,460	74,366	5,001,826	5,180,070	687,399	150,981	1,572,603	3,132,815	60.5	2,047,255	911,422	959,195	473,925
St. Louis Southwestern Lines.	1,575	44,343,905	612,706	44,956,611	46,486,290	5,527,128	1,217,858	15,213,783	28,588,808	61.5	17,871,082	7,370,545	8,507,840	7,568,968
St. Louis Southwestern Lines.	9 mos.	7,961,112	1,158,706	9,119,818	9,966,157	1,936,889	314,730	3,712,046	7,851,468	78.8	2,115,188	1,007,033	1,003,558	340,948
Seaboard Air Line.	4,152	80,460,396	12,341,184	92,801,580	98,966,434	15,533,167	2,747,218	37,971,188	77,850,804	78.0	22,003,677	9,453,537	10,480,358	6,741,885
Seaboard Air Line.	9 mos.	16,893,773	1,983,279	18,877,052	20,272,646	2,895,869	343,920	7,902,420	15,509,648	76.5	4,762,598	2,291,339	2,333,054	1,493,036
Southern Railway.	6,483	154,659,972	16,064,402	170,724,374	182,966,579	24,897,335	3,139,556	70,323,956	137,785,265	75.3	45,183,314	20,793,600	21,553,003	14,998,873
Southern Railway.	9 mos.	1,376,955	136,811	1,513,766	1,614,950	296,316	29,615	545,612	1,138,733	70.5	476,117	263,698	274,637	159,880
Alabama Great Southern.	316	11,797,103	1,113,201	12,910,304	13,707,759	1,815,618	273,338	4,666,777	9,972,457	72.8	3,734,302	1,992,865	1,992,865	1,199,969
Alabama Great Southern.	9 mos.	3,005,353	204,906	3,210,259	3,368,104	492,448	74,593	963,198	2,227,734	66.1	1,141,370	590,277	718,552	503,343
Cin., New Orleans & Texas Pacific.	337	26,721,167	1,895,443	28,616,610	29,985,676	5,629,213	531,691	8,873,219	19,519,783	65.1	10,465,893	5,322,402	6,249,662	4,445,851
Cin., New Orleans & Texas Pacific.	9 mos.	461,736	597,352	1,059,088	1,199,826	72,391	8,035	190,120	404,572	73.8	143,320	26,701	51,207	-8,565
Georgia Southern & Florida.	397	4,325,166	597,352	4,922,518	5,398,232	671,699	71,142	1,987,471	4,021,961	74.5	1,376,271	383,503	374,603	243,329
Georgia Southern & Florida.	9 mos.	1,011,631	67,988	1,079,619	1,133,598	141,157	17,903	243,458	542,577	47.9	591,021	264,569	271,173	176,681
New Orleans & Northeastern.	204	8,468,451	610,489	9,078,940	9,559,341	1,301,666	166,683	2,321,786	5,102,745	53.4	4,456,596	1,941,434	2,031,206	1,327,334
New Orleans & Northeastern.	9 mos.	32,905,470	4,568,789	37,474,259	40,266,281	4,325,363	785,067	15,779,056	30,730,166	76.3	9,536,115	4,302,441	3,856,873	2,198,725
Southern Pacific.	8,179	280,279,887	34,167,017	314,446,904	341,657,017	38,871,750	63,711,514	62,106,993	139,702,190	78.1	74,773,098	34,063,942	29,196,958	23,532,363
Southern Pacific.	9 mos.	9,064,116	924,222	10,000,338	10,752,555	1,243,180	160,897	4,205,911	7,718,970	71.8	3,033,585	1,213,962	1,230,339	908,597
Texas & New Orleans.	4,316	81,411,671	7,703,689	89,115,360	95,304,194	12,162,648	1,316,395	18,111,774	37,950,252	72.8	25,914,516	10,237,030	10,760,683	10,619,058
Texas & New Orleans.	9 mos.	2,133,691	119,070	2,252,761	2,469,010	461,322	253,930	1,201,991	2,153,141	87.2	315,869	168,979	-81,316	122,468
Spokane, Portland & Seattle.	945	17,015,717	891,588	17,907,305	19,119,727	4,139,520	2,074,397	7,789,948	14,529,218	76.0	4,590,509	1,396,553	1,719,392	1,033,908
Spokane, Portland & Seattle.	9 mos.	3,771,270	4,627	3,775,897	64,214	64,377	9,085	178,930	334,171	83.8	64,382	27,801	14,043	-5,020
Tennessee Central.	286	3,289,600	72,716	3,362,316	3,559,146	558,731	600,779	78,983	1,613,072	84.3	557,212	206,299	69,498	-112,081
Tennessee Central.	9 mos.	5,425,971	457,753	5,883,724	6,373,748	742,327	980,919	155,173	2,443,020	72.2	1,774,427	666,797	796,267	467,958
Texas & Pacific.	1,854	49,471,639	4,452,493	53,924,132	58,034,000	7,263,736	1,432,041	23,009,750	42,990,703	74.1	15,043,297	5,655,248	6,323,232	5,354,550
Texas & Pacific.	9 mos.	209,861	.....	209,861	124,731	73,876	66,100	5,764	62,182	91.9	19,666	36,821	-34,020	18,131
Texas-Mexican.	162	2,112,055	6	2,112,061	2,396,305	413,097	291,279	51,477	589,392	63.5	874,840	425,146	276,859	452,832
Texas-Mexican.	9 mos.	1,226,478	.....	1,226,478	408,526	85,063	22,225	31,852	99,236	63.1	150,635	43,497	82,715	-3,265
Toledo, Peoria & Western.	239	3,999,752	6	3,999,758	3,316,474	694,875	210,721	296,450	872,212	68.7	1,039,817	385,063	463,158	-365,275
Toledo, Peoria & Western.	9 mos.	34,563,559	3,740,780	38,304,339	41,338,002	4,925,875	6,216,267	691,297	13,442,722	66.0	14,071,482	6,039,701	6,202,707	3,383,641
Union Pacific System.	9,752	261,440,349	32,899,710	294,340,059	320,356,512	45,331,139	52,180,748	6,968,797	112,560,176	73.4	85,061,907	44,670,543	30,222,797	25,301,297
Union Pacific System.	9 mos.	6,979,832	4,202,435	11,182,267	11,422,732	1,509,013	2,258,590	30,701,272	57,353,888	70.5	21,671,844	8,368,728	9,445,979	7,190,485
Utah.	111	113,951	.....	113,951	114,227	31,639	54,028	49,435	143,295	125.4	-29,068	11,632	-33,385	-10,874
Utah.	9 mos.	1,226,478	.....	1,226,478	1,320,169	283,257	426,280	5,770	1,290,244	104.9	-60,075	110,625	-102,898	31,338
Virginian.	663	3,178,838	5,663	3,184,501	3,279,839	333,432	597,663	37,916	842,156	58.1	1,373,936	688,000	918,052	765,610
Virginian.	9 mos.	27,079,072												

General News

(Continued from page 62)

revision will keep our schedules in line with present passenger travel volume, which is off about 10 per cent from a year ago. The adjustment, together with the new Diesel-electric locomotives and the hundreds of new passenger cars we have been placing in service under our nearly completed \$95,000,000 postwar passenger equipment program, should permit us to do a much better job in operating our passenger trains during the adverse weather conditions of winter."

Details are still being worked out, the road said, but among the scheduled changes are the following: The "Pace-maker" and the "Advance Commodore Vanderbilt" will be combined, eastbound and westbound, between New York and Chicago; the "Fifth Avenue Special," from Chicago to New York, will be combined with the "Interstate Express;" and the "North Shore Limited" via the Michigan Central will be discontinued from Chicago to Buffalo, N. Y.

Faricy Tells Petroleum Institute of Railroads' Fuel Economy

The railroads are consumers of petroleum products in quantity and variety not always fully realized, William T. Faricy, president of the Association of American Railroads, declared in a paper at the November 9 session of the Transportation division, American Petroleum Institute, which held its 28th annual meeting in Chicago, November 8 to 11, inclusive. In his address, which was read by Colonel Robert S. Henry, vice-president of the A.A.R., because the speaker was recovering from an operation, Mr. Faricy said that the railroads consumed, besides various lubricants, between one-fifth and one-fourth of the heavy residual fuel oil, and about one-sixteenth of the distillate fuel burned in the country.

Pointing out that no form of inland transport can move so many tons of freight so many miles with a given quantity of fuel as can the railroads, the A.A.R. president declared: "To get some idea of what this sort of fuel efficiency means to the petroleum supplies of the nation, consider the fuel requirements involved in moving 100,000 tons of freight across the American continent by various means of transportation. The air-lift into Berlin has given us a new conception of the possibilities of moving freight by air in emergency situations when economic considerations can be, and must be, disregarded—but to move this hypothetical 100,000 tons of average freight by air across America would require, in fuel, the contents of nearly 2,700 tank cars, each one containing 10,000 gal. of high-octane gasoline."

To do the same job by Diesel truck, said Mr. Faricy, would require the

Briggs & Stratton Engines— America's Choice for Thirty Years

For 30 years Briggs & Stratton 4-cycle air-cooled engines have proven their value, performance, and dependability under the most exacting conditions.

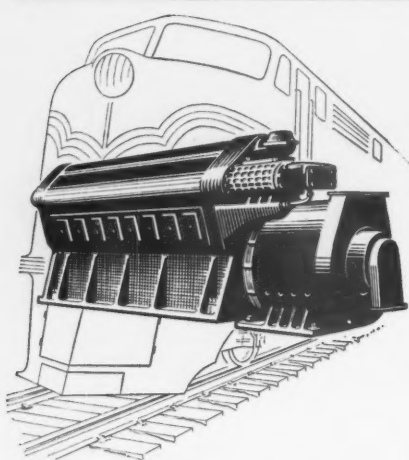
Users, manufacturers, and dealers *know* that equipment powered with these engines is powered **RIGHT**.

This public confidence has resulted from the engineering leadership, unending research, and the skill of Briggs & Stratton workmen — all directed at making the world's finest single cylinder, 4-cycle gasoline engines.

BRIGGS & STRATTON CORPORATION

Milwaukee 1, Wisconsin, U. S. A.





dieselization

Diesel engines in railroad locomotives are piling up an enviable trouble-free performance record. Many castings in these engines contain specified Molybdenum contents.

When wear or heat must be resisted, and high strengths are required, the use of Molybdenum in cast iron is becoming more and more routine.

The listing of a cylinder liner for Diesel use in railroad locomotives containing 3.20% Carbon, 1.90% Silicon, 0.85% Manganese, with 0.20% Chromium, 0.40% Molybdenum and 0.45% Nickel added can be found on page 10 of our new booklet—"Applications of Molybdenum Cast Irons."

Dozens of other alloy cast iron compositions used in Diesel engines, as well as hundreds of other Molybdenum-containing compositions are similarly listed in this new booklet. Write for it!

Climax Molybdenum Company

500 Fifth Avenue
New York City

Please send your FREE BOOKLET
"Applications of
Molybdenum Cast Irons"



Name.....

Company.....

Address.....

RA-11

F9 ©

contents of 260 tank cars or 10,000-gal. capacity each. By railroad, using Diesel locomotives, the job would require the contents of fewer than 90 such cars, he added. The speaker pointed out that oil-burning steam locomotives would use about 460 tank cars of heavy residual oils to perform the same work.

Professor John S. Worley, of the University of Michigan, spoke on "Current Critical Problems of Highway Transport." He made a plea for heavier loads on the highways, to "make possible fewer trucks on the highways as well as a lower charge for service, all of which is in the public interest." He asserted that the public is not getting the full use of the highways to which it is entitled; and added: "The current interest in highway planning is to be commended; however, there is evidence of grandiose proposals which will lead to extravagance and the waste of public funds. This should give us great concern."

George W. Whittaker, vice-chairman of the legal advisory group of the Transportation Association of America, told of the work of that group in connection with the Cooperative Project on National Transportation Policy.

Speaking on transportation of petroleum, with particular reference to pipe lines, Interstate Commerce Commissioner Clyde B. Aitchison said in part:

"Rail tank cars also play an im-

portant part in the transportation of crude oil. The ability of the railroads to rise to an emergency was demonstrated during the war.

"It is an attractive subject for speculation whether the increasing use of fuel oil, and the contemporaneous demand for low cost movement, may not lead the railroads to interest themselves in pipe-line operations, to the extent they can do so lawfully.

"The United States is the last great country to adhere to the system of private ownership and operation of the means of transport. If government ownership ever comes here, it will be because the private carriers are unable to give the kind of service demanded in the public interest without imposing rates that cannot be borne by industry and by the people. Or, it may be because some tremendous emergency has forced taking over of the carriers (or some types of them), for the reason that individually or in concert they cannot or will not give a service completely integrated so as to meet the needs of the emergency. There are, and have been, many who would like to see this occur because of the end result—nationalization of the carriers. I am not one of them.

"To avoid both dilemmas will be a tremendous difficulty, but if we are to continue our way of life, every effort must be put forth to find a solution, and then apply it."

Eye Protection for Gas Welders Who Wear Glasses



Style CW60



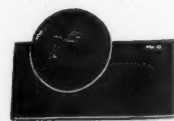
There's comfort for wearers of prescription glasses in WILLSON Cover-All* welding goggles with the deep eye cups. And the adjustable leather bridge covers a danger spot and rests lightly on the nose. WILLSON-Weld* lenses are carefully matched for pairs; inspected for finest optical quality, and exceed Federal Specifications for filtering out ultraviolet and infrared rays.

For complete information on these products and their application, as well as many more eye and respiratory protective devices, get in touch with your nearest WILLSON distributor or write us direct.

WILLSON



Style DC53
Chip-Weld Goggles



WILLSON-WELD* Glass made in shades from 3 to 14 incl. for all kinds of gas and arc welding

*T.M. Reg. U.S. Pat. Off.

WILLSON PRODUCTS, INC., 241 WASHINGTON STREET, READING, PA.